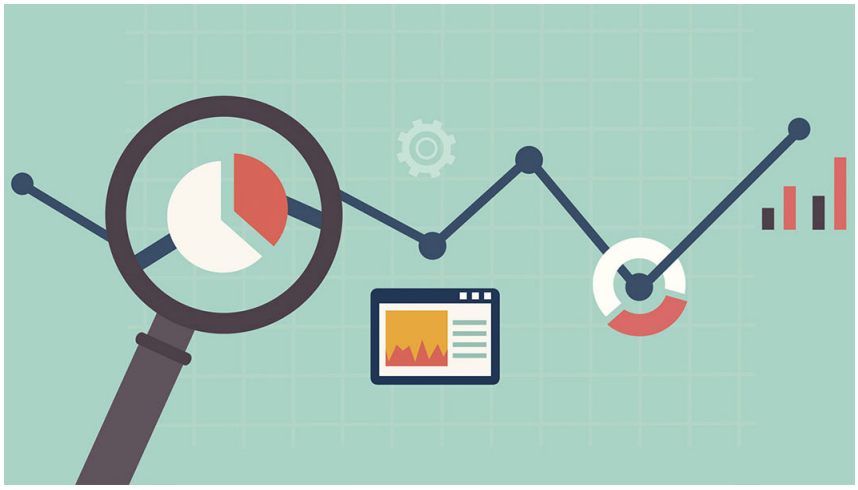
Developing Training to Change Behaviour:
A brief guide for educators



Introduction

This guide is for anyone who is designing training to change the way someone practices. It will take you through the design of training from defining the practices, and it includes activities to help identify and address any difficulties the trainees might have in putting their training into practice. The guide translates state of the art educational and behavioural theories in translating them into practical hints and tips that fit easily within a typical training format.

The benefit of designing training using educational and behavioural theories is that using effective techniques to change behaviour, within training, means that trainees are more likely to change their practice.

Whether or not someone changes their practice is determined by their capability, motivation and opportunity to carry out the new tasks or behaviours.

Finally, the guide will introduce you to the Behaviour Change Technique Taxonomy[1] so that you can think about other techniques that you can use when you are interacting informally with your trainees.

For more information about how behavioural science can help change health professional behaviours see our elearning[2].

[1] https://www.ucl.ac.uk/behaviour-change-techniques
[2] www.mcrimpsci.org/elearning

Authors

We are health psychologists from the UK, who have volunteered and worked nationally and internationally on education and training interventions to change health professional practice. We have worked and volunteered through The Change Exchange[3], a University of Manchester project to encourage and support health psychologists to volunteer in health partnerships.

Lucie Byrne-Davis & Jo Hart, University of Manchester, UK

Eleanor Bull, Manchester Metropolitan University, UK

Wendy Maltinsky, University of the Highlands and Islands, UK

February 2019

[3] For more information about The Change Exchange see http://www.mcrimpsci.org/the-change-exchange/

Defining the behaviours that you want to change

You might be used to specifying the *intended learning outcomes (ILO)* of education and training. Here, we are asking you to specify the *intended behavioural outcomes (IBO).* These are different because ILOs specify what you expect someone to *know* or *know how to do.* When you specify IBOs you are detailing what you expect the trainees to *do* when they put the training into practice.

You should list the IBOs taking care to considering all aspects of the behaviour, namely TACTA[4]:

Target: With whom is the behaviour performed e.g., patient or colleague **A**ction: What is the action being performed? **C**ontext: Where is the behaviour being performed? **T**ime: When is the behaviour being performed e.g., after admission, before touching a patient. **A**ctor: Whose behaviour (e.g., nurse, doctor, family member)

You should be able to construct a sentence that specifies each IBO. For example, if you were targeting the cleaning of a woman's back prior to spinal anaesthesia during caeserian section, you might have as an IBO:

*The **individual responsible for anaesthesia** (Actor) in the **operating room** (Context) will **clean each woman's back** (Action and Target) **before any contact is made between scalpel and back** (Time).*

If you were trying to reduce antibiotic prescribing in primary care centres for upper respiratory tract infection you might have as an IBO:

*The **prescriber** (Actor) **in the primary care centre** (Context) will **counsel the patient and not prescribe antibiotics** (Action) to **a patient with an upper respiratory tract infection but no symptoms indicating bacterial infection** (Target) **during a consultation** (Time).*

Our research has shown that training courses often have around 50 behaviours. It would be impossible to create IBOs for each of these. Rather, we suggest that the team decide which ones are the most important to target. Importance might be because they are the hardest behaviours to change, or because they are the behaviours that would have the most impact if changed or even because they were the easiest to change and would therefore bring the most success. It is hard to specify behaviours. For more information see our elearning[5] and our briefing[6]

[4] TACTA: Jill Francis et al., http://www.ohri.ca/clinicalresearchtraining/documents/1120-Knowledge%20Translation.pdf

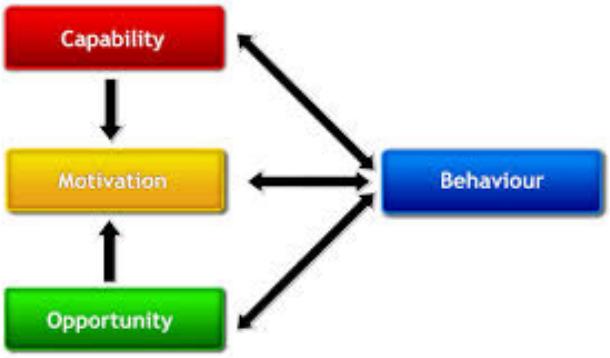
[5] http://www.mcrimpsci.org/elearning/specifying-the-behaviours-you-want-to-change/

[6] http://www.mcrimpsci.org/wp-content/uploads/2017/03/Teams-Together-briefing-2.pdf

Creating education that anticipates, explores and addresses influences on practice

As experienced educators, you will know that getting health professionals to change what they do is not as simple as telling them the intended behavioural outcomes. Nor is it as simple as teaching them about how to do those behaviours.

There are a range of factors that will influence whether someone does each of the IBOs when they return to practice. We can usefully summarise these as capability, opportunity and motivation[7].



Capability is both physical and psychological which are skills and knowledge respectively.

"I know it" and *"I know how to do it"* and even *"I can show how to do it"*.

Opportunity is both physical and social. Physical opportunity covers things like time and equipment and colleagues to do tasks with or for you. Social opportunity is best summarised as 'the way we do things round here' and is sometimes known as 'culture', 'peer pressure' or 'hidden curriculum'.

"I have everything I need to do it" and *"people whose opinion I care about think I should do it"*

Motivation is both reflective and automatic. Reflective is when people weigh up the pros and cons of the behaviour and will include things like whether they think the behaviour will lead to a good end point, whether the behaviour is difficult or easy, whether they feel in control of doing the behaviour. Automatic is prompts, cues, impulses to carry out the behaviour and includes things like environmental prompts or cues and habit and conditioning.

"On balance I think it is a good idea" and *"It is part of my usual practice"* and *"I just do it without really thinking too much about it".*

[7] Michie et al., Behaviour Change Wheel (2011) https://implementationscience.biomedcentral.com/articles/10.1186/1748-5908-6-42

The process of creating behaviourally informed training

You will follow a pattern for each IBO that will be:

1. Establishing what the learners already know / already do
2. Exploring what might be difficult for the learners about the specific IBO in practice
3. Developing capability, opportunity and motivation around that IBO.

Sometimes educators are worried about using active or playful learning because, depending on the experience of the learners, this might be something they are not used to. We have found that, after an initial surprise that the learning is not all instructional, people accept the interactive way of learning.

Take each IBO in turn and go through the following process.

Capability

Design an activity that will establish what learners already know (knowledge) and already can do (skills: not the same as *will do*, which is influenced by other factors).

Note the difference between what learners know and can do and the IBO. Consider sharing this with the learners, as you need to ensure that the knowledge and skills are known unknowns in order to prepare the learners to develop necessary knowledge and skills.

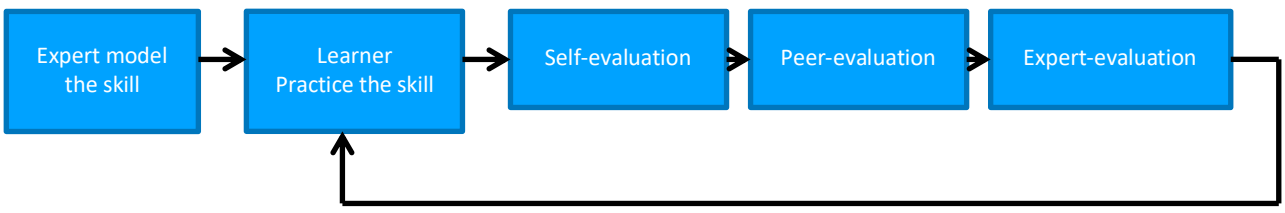
Psychological capability

Design activities that will develop necessary knowledge. When doing this:

- Situate the knowledge in realistic contexts
- Use stories
- Consider whether you should translate into different languages
- Use examples.

Physical capability

Design activities that will develop necessary skills. When doing this follow the pattern:



Opportunity

Physical opportunity

Design an activity in which learners will reflect on what would get in the way of them doing that IBO in practice (defining barriers) thinking specifically about time, equipment, other people.
Ask the group if they have any solutions for these issues. If yes, problem solve together by creating coping plans. Coping plans are if-then statements where you specify what you will do if a particular barrier arises. For example, if a group identify that hand washing before seeing patients is difficult because the hand gel is kept in another ward, they might identify that carrying hand gel with them might be a solution. Their if-then statement might then be:

"If I am beginning a ward round and I notice that there is no hand gel in my ward, then I will go into the other ward and get hand gel and keep it with me as I see patients."

Social opportunity

Because the views of others may influence whether and how someone does things, it is important to ask learners to reflect on this and share solutions about how to address any barriers. You could start this by asking learners what other people would think of them doing the IBO in practice. You might like to do this by creating a story in which someone like the learner did the IBO and asking them to think about what the other team members, patients, families etc. might be thinking in the story. Identify any social opportunity barriers at this point and reflect them back to the learners. Ask the learners to make coping plans about what they would do if anyone expressed those opinions or action plans about what they might be able to do to prepare others for them using the IBOs in practice.

Motivation

Reflective motivation

Three issues seem to affect reflective motivation about IBOs: outcome expectancies, self-efficacy and behavioural attitudes. There may be others specific to your IBOs and there might be literature or anecdotes about these, but these three seem to cover many of the issues raised in many situations.

Outcome expectancies

In order to be motivated to do the IBO, learners need to believe that if they do it, there will be a better outcome for someone. Ensure that you articulate what these better end points are, in other words explain who will benefit from the IBO and how and why. Studies show that communication containing both statistics and individual

stories can help people understand why something is beneficial and to whom; and that the story should be told, or be about, someone who is credible: often a leader or someone like the learners themselves. Create some stories, slides, handouts etc. about the positive endpoints of each IBO.

You might also consider asking the learners what they think might improve if they do this IBO. If they are not sure, reiterate the outcome benefits.

Self-efficacy

Learners might not believe that they *can* do the IBO – we call this having low self-efficacy about the behaviour. Ensure that you build self-efficacy as you go along. This can be done in the skill developing session by using good feedback. Phrases like 'other people have found this hard before but they found that they were able to do this after practicing'. Consider including a story of people, similar to the group of people you are training, who believed they could not do the IBO but then learnt and now are doing it in practice.

Behavioural attitudes

Attitudes about actually doing the new behaviour (not just about the end points) will also influence reflective motivation. Design an activity in which learners discuss what it would be like to do the IBO in practice (or what it is like if they have done it before) and ask them to think about whether there is anything they can do to make it easier or more acceptable.

Automatic motivation

Prompts and cues are really powerful drivers of behaviour. We tend to think we are in control and making decisions about what we do but actually a lot of our behaviour is automatic and done with little conscious effort. Design an activity in which the learners can think about whether there is anything they can put in their place of work which will prompt or cue them to do the IBO. This might be a poster, or it might be moving where equipment is kept. Making if-then plans can also support automatic motivation but this time instead of coping with something that might get in the way, you can encourage them to use if-then plans to make a plan that cues them if they see a particular cue. For example, if you wanted someone to follow the 5-moments of hand hygiene, you might get them to make an if-then plan which was something like:

"If I approach a patient's bed, then I will take the hand gel from my pocket and sanitise my hands".

The Behaviour Change Technique Taxonomy (BCTT v1)

There are 93 distinct methods for changing behaviour, and we know these as behaviour change techniques (BCTs). There is a taxonomy of these, where similar ones are grouped together, called the BCT Taxonomy (v1). BCTT v1 is a taxonomy of 93 behaviour change techniques divided into 16 domains, including regulation, goals and planning, feedback and monitoring and social support.

You will find that you employ some of these BCTs in your training without specifying them. In our work[8], we have found that over 40 BCTs regularly appear in training. These are things like 'feedback on the outcome of the behaviour' when educators use phrases like "if you did this in real life, this could save a baby's life" or 'action planning' when educators ask learners to create a plan about what when and where they will do a particular behaviour.

We encourage you to read about the BCTT v1 and think about how you can use more BCTs in your training. Often it is just a matter of tweaking how you present something or how you structure feedback. Sometimes, it can help you think of new activities that will help your learners understand their own behaviour or drive their own behaviour change. We have a pack of cards, including the BCTs which can and do appear in training, which describe activities you can include in your training to use that BCT. If you would like a pack, get in touch with us at thechangeexchange@manchester.ac.uk .

Summary

Changing practice is much more than teaching and training someone to do something.

Behavioural science tells us that just because someone *can* do something does not mean that they *will*.

Training is more likely to lead to practice change if it addresses all the influences on behaviour, not only knowledge and skills.

By creating a set of IBOs and then planning to address the capability, opportunity and motivation of your learners about each IBO, you are developing training with the specific purpose of changing practice.

[8] https://academic.oup.com/tbm/advance-article/doi/10.1093/tbm/iby125/5236892?guestAccessKey=bdb4af13-1d4d-4e9a-b236-b1d1066535bd