

CONSULTING YOUR COMPASS

The Brain and Change



12



GENERAL OVERVIEW

- In Step 1, participants review initial weekly goals they set for themselves in the **Goal Setting** workshop and identify the type of change required (specific steps, adding a new behavior, or stopping an existing habit).
- Step 2 explores ingrained habits and neuroplasticity to understand the brain mechanisms involved in creating/weakening mental habits.
- Step 3 demonstrates the human ability to control our thoughts and examines common types of automated thinking that can become habitual (cognitive distortions).
- Step 4 introduces the concept of ‘slogan practice’ to help reprogram negative thought patterns.
- In Step 5 participants apply the neural pathways model to behavior change and visually represent the stages of the process.



PURPOSE

- Understand that the brain has flexibility and that habits are reinforced in the brain through repetition and weakened by a lack of use.
- Understand that humans have control over how they think and that negative thoughts and distortions become mental habits that shape our world and limit our ability to change.
- Practice becoming aware of the negative mental habits that may hold us back.



GUIDING QUESTIONS

- Can I change how my brain is wired?
- Do I have control over what goes on in my mind?
- What thinking habits do I have that don’t serve me?



SKILLS FOR SUCCESS

- This workshop is a great opportunity to introduce the **Adaptability Self-assessment** (Handout 4), both as a prompt for how to persist, adapt, adjust goals, and prioritize tasks, and as an opportunity to self-assess for growth.
- Parts A and B of the handout can be used before the workshop and revisited after, to have people identify what subfactors practiced, and to revise their responses if helpful.
- Part C could be completed as a follow-up assignment and used for discussions in coaching.
- The **Informal Assessment for Facilitators** can also be used with the **Self-assessment Checklist** in a coaching situation to compare perspectives on skill level and growth. These tools are available for download at changeitup.ca/curriculum-extensions

Change it UP

SKILLS FOCUS

- Adaptability
- Reading
- Creativity and Innovation



WHEN TO USE/TIMING

- After the **Goal Setting** workshop and when looking to initiating positive change
- 2 half days + follow up



GET PREPARED and materials needed

- Handout 1: Ingrained in The Brain**, one per learner
- Handout 2: Unhelpful Thought Habits**, one per learner
- Handout 3: Creating New Mental Habits**, one per learner
- Handout 4: Adaptability Self-assessment**, one per learner, if using
- Paper, cardboard, markers or pencil crayons
- Sticky notes or index cards



VIDEO PREVIEW

- **Neuroplasticity:** [youtube.com/watch?v=ELpfYCa87g](https://www.youtube.com/watch?v=ELpfYCa87g)

"Our minds have the incredible capacity to both alter the strength of connections among neurons, essentially rewiring them, and create entirely new pathways. (It makes a computer, which cannot create new hardware when its system crashes, seem fixed and helpless)."
— Susannah Cahalan

LEARNING ACTIVITIES

STEP 01 Checking in

1. As a follow up to the **Goal Setting** workshop, have participants reflect on the successes and challenges they encountered by sharing with a partner, or small group. Share challenges as a large group as well, if possible, discussing the 'why' of any issues that arose (*e.g. didn't have what I needed to start, forgot to do every day, did what I usually do instead, couldn't get family on board, behavior too vague.*)
2. As a group, have people raise their hands if they chose objectives that were a) specific actions or 'to-do' items (*e.g. buying running shoes, reading one chapter*), b) adding a new or behavior habit (*e.g. walking 10 minutes a day, flossing their teeth*) or c) stopping an existing habit or behavior (*e.g. not drinking pop, no screen time after dinner*). Debrief with the following questions.
 - Did they experience any differences in their successes or challenges with those different types of goals? Which do they think is harder to do? (*Stopping an existing habit is the most difficult, especially if it is an ingrained habit.*)
 - How much of our everyday behaviour and actions are really habits or automatic behavior? Is this good or bad? (*Studies indicate 40 - 95 percent of how we think, talk, and act is habit, so likely at least 50% of what we say, do and think is automatic. It's good when it helps us simplify our life, like turning on your signal when you want to turn left, and sometimes it's bad, like thinking negative things about ourselves.*)
 - How does this affect our ability to work towards our life vision and the goals we set for ourselves? (*We likely have to ditch some old habits and add some new habits in order to get where we want to go.*)
 - What does it mean to have a habit that is 'ingrained'? (*It is really built in, deeply rooted in your brain and probably tied into your regular routine.*)

STEP 02 It's all in your head

1. Distribute **Handout 1: Ingrained in The Brain** and ask participants to get ready to record (*in notes or drawings*) relevant material from the video presentation.
2. When participants are ready to go and have pen in hand, ask them to *change hands*, and write their name and the date on the top of the sheet using their other (non-dominant) hand.

Debrief with the following.

- Can they do it? Was it hard to do? How did it feel?
- Do they think they could learn to write with their non-dominant hand? Why or why not?
- Have they ever tried to change the way they do something or break a habit? Explain.

Ask learners to keep the writing example in mind as they watch the video.

3. View the following video **Neuroplasticity**: [youtube.com/watch?v=ELpfYCYa87g](https://www.youtube.com/watch?v=ELpfYCYa87g). At the end, give participants a few moments to fill in more of their graphic organizer and discuss briefly as a group.
4. Return to the 'writing with the opposite hand' experiment. Discuss the following:
 - What makes habits become ingrained? (*Repetition*)
 - What leads to habits becoming weaker? (*Lack of repetition*)
 - Given what they have learned, would be possible to learn to write with the other hand?
 - What would they have to do to make it happen?
 - How hard would it be? (*Discuss how 'well worn' this pathway is and how these kind of pathways take more work to change, but it's possible.*)

STEP 03 Exploring possible futures

1. Have participants close their eyes and ask them to do the following (read this through slowly, giving them time to imagine the items).

Picture a red triangle in their minds. Now watch it fade away. Picture a large green tree by a river. Now watch it fade away. Picture a full moon. Now watch that fade away.

Debrief with the following.

- Was it easy to do? Could they make the images appear and disappear?
 - What does it tell us about our brains and our abilities as humans? (*We have the ability to clearly visualize things that are not in front of us. We have the ability to control the thoughts and images in our minds. The thoughts and the thinker are not the same – there is separation.*)
 - Do they feel they have the ability to control their thoughts? Or do they seem automatic? (*Thoughts can become habits that we reinforce by thinking them over and over so they feel automatic. These automatic thoughts can shape every experience, affect our relationships, and the things we do or don't do.*)
2. Ask participants to get ready for a quick quiz. Ask all 4 questions first then take up their guesses and then the real answers. They need to write down the answers.
 - How many thoughts do you think the average person has in a day? (*The average person has about 12,000 to 60,000 thoughts per day.*)
 - What percentage of those thoughts are negative? (*80%*)
 - What percentage of all thoughts are repetitive and thought on most days? (*95% were exactly the same repetitive thoughts as the day before.*)
 - What percentage of people found that when their worries did come true, they either handled it better than they expected, or the difficulty taught them a lesson worth learning. (*79%*)

Have participants take 5 minutes to brainstorm some of the negative things they tell themselves. Encourage whatever comes to mind about their body, their abilities, or their future possibilities and make it clear this is not something they need to share with anyone.

3. Write the following on the board.

Events + Thoughts = Emotions

Ask participants to work with a partner and reflect on what they think the “formula” means and how it relates to automatic thinking and forming mental habits.

Points for Discussion

- Our thoughts act like a filter on everything that we experience.
- It's our thoughts, not events, that really determine how we feel and what we believe we can do.
- What we habitually think will determine how we habitually feel and set limits on how we act.
- Given how much of what we think is negative, we are causing ourselves a lot of misery!
- When we think about changing behavior to reach our goals, we need to include thought habits that can hold us back.


4. Distribute **Handout 2: Unhelpful Thought Habits**. Discuss how we can begin to change and disrupt our negative mental habits by becoming aware of what and how we are thinking. As it turns out, there are some really common ways the human brain distorts events into the negative, and we can start to make changes by recognizing the traps we fall into.

Have participants read through the handout, paying attention to the ones that feel very familiar to them. Have them reflect on the negative self talk they recorded earlier and see if they can find where that type of thinking fits in.

Debrief with the following.


- Were you surprised how many of the thought distortions you could identify with?
- How does it feel knowing that all humans tend towards the same negative thought habits?
- When you look at some of the things you say to yourself, would you say them to a friend? Your children?
- How do you think we can try to shift these mental habits? (*The first step - and most important step - is becoming aware, then we can apply some of our habit-changing techniques and start replacing them with more positive messaging to build new neural pathways.*)
- Have participants react to the following quote.

“ Make sure your worst enemy is not living between your own two ears. ” - Laird Hamilton

 We will be coming back to interrupting negative thoughts in other workshops. For now the goal is to understand that thoughts can also be habitual and to initiate awareness about our own thought distortions that are unhelpful, especially as we begin to take on behavioural change.

STEP 04 Forming new paths

1. Introduce learners to the concept of “Lojong” or slogan practice. These are simple one line sayings that you recite to reprogram your brain’s automatic (negative) responses. The idea is to rewire our brains by repeating the slogan and forming a new mental pathway that will both guide your immediate behavior and start to crowd out the old negative thoughts. Write some of the following on the board and discuss the meaning.
 - Think beyond either/or
 - Drop the story
 - Look how far I have come
 - Undistort the distortion
 - Don’t believe everything you think
 - There are other possibilities
 - Do I know for sure that this is true?
 - Assume good intentions
2. Have participants think about a slogan or mantra that addresses a thought pattern they would like to shift (or use one from above). Have them copy it out onto post it notes or index cards to put in visible places to get them started in creating the new habit of using the slogan. Suggest they add a gesture (e.g. hand on heart) or a powerful pose to make it even more effective.
3. Have the group share some of their slogans if they are comfortable doing so, and have them create posters for the room if they feel they would be helpful.

 **Learn more:** This idea and some of the slogans above were taken from M.J. Ryan’s book *Habit Changers: 81 Game-Changing Mantras to Mindfully Realize Your Goals*. It is also a great reference for habit change.

STEP 05 Setting a course

1. Distribute **Handout 3: Creating New Mental Habits**. Read the introduction together as a class.
2. Distribute paper or cardboard and markers or pencil crayons. Have participants work in pairs or triads to create a visual 'storyboard' of the '3 steps to making change'. Encourage creative representations that clearly illustrate the strategies.
3. Use the final creations as a reference and reminder about changing behaviour. Debrief with the following.
 - We often think of failing at goals or resolutions as a failure of willpower. Is it? (*Will power and motivation will never be enough to keep us on track, they swing wildly all the time. We have to design things in ways that set ourselves up for success, and that's what we are going to work on together.*)
 - How does the experience of failing to reach our goals typically make us feel? What are the things we say to ourselves? Does that help?
4. Discuss the following quote and the unhelpful nature of negative self-talk.

"You change best by feeling good, not feeling bad." - BJ Fogg, Behavioural Scientist



Online Adaptation: Have pairs/triads use a free storyboard software like *Storyboarder* to create and present their 3 steps to making change.



CHECK OUT QUESTION

- What's one mental habit that you would like to change?



SPIRALLING CONCEPTS

- Revisit cognitive distortions and negative thinking patterns as you move through the session. Make it a group effort to recognize the patterns and call them out in ourselves and each other. Work as a group to make sure thoughts and words build people up instead of tearing them down.
- Encourage the inclusion of mental habits in the next two workshops on **Building Positive Habits** and **Addressing Negative Habits**.
- Encourage and demonstrate the use of slogan practice as you move forward; as a way to remind ourselves to think (and act) differently.



EXTENSION ACTIVITIES

- Have participants keep a 24 hour log of negative self talk in themselves and others.
- Have learners play out possible consequences of the thought habits in **Handout 2: Unhelpful Thought Habits** and offer alternative self-talk suggestions that might lead to better outcomes.
- Additional activities to build Adaptability skills are available at upskillsforwork.ca/wp-content/uploads/2021/08/ABC-UP-Adaptability.pdf

What is Neuroplasticity?

What makes certain behaviours become habits?

What makes habits get weaker?

What does it take to rewire your brain?

Mind Reading is the habit of assuming you know what someone else is thinking. We imagine what's going on in someone else's head, which is a) impossible, b) usually negative, and c) doesn't consider other neutral or even positive possibilities.

Example

Your friend doesn't respond to your text and you immediately start to think "She must be mad at me for something."

Fortune Telling is very similar, but you are making predictions about the future with little (or no) evidence. When your mind comes up with a negative outcome or worst case scenario, we tell ourselves that that's what will happen.

Example

While you are waiting for your friend to text you back, you start thinking how you need to make new friends, but you'll never be able to. You are just going to be lonely and friendless for the rest of your life.

Overgeneralization is when we take one or two instances or examples and generalize them to be an overall pattern that is true for eternity. These habits of mind often include words like "always" and "never". It typically has a mental filter that zooms in on the negative behavior and ignores any other positive experiences or examples. It also can lead us to labelling (and mislabeling) ourselves and others with inaccurate, distorted terms.

Example

After getting one poor grade in a course, you tell yourself "I always fail at everything I try. I am such a loser."

Magnification is when we take our own flaws or mistakes and make them huge – or we take small negative events and turn them into massive disasters in our minds (catastrophizing).

Example

After forgetting something you meant to say in a job interview, you keep telling yourself "I totally blew that interview. I DEFINITELY WON'T GET THE JOB. How am I going to pay my rent? That's probably the only job I was qualified for. I'm going to be homeless."

Minimization is the exact opposite. It's when we dismiss our strengths and positive qualities or the likelihood of good things happening. It can also lead us to disqualify positive input altogether, so we are unable to accept compliments, or recognize examples of being good at things.

Example

After getting a great grade in a test, we tell ourselves "That was a fluke. The test wasn't worth that much anyway. I'll probably still fail the next one."

Black and White Thinking is the habit of looking at everything in terms of extreme categories with no shades of grey. Things are fantastic or horrible. You are perfect or a complete failure.

Example

You go on a first date with someone who makes an awkward comment and you decide to write them off as a loser (despite the fact that you had fun and they had a great sense of humour).

Personalization is when we take everything personally or assume excessive amounts of responsibility, especially for things that are mostly or entirely outside our control (like other people's feelings and actions).

Example

Your friend is in a really bad mood one day when you go out walking and you think "I must have done something to make her angry."

Should Statements are a kind of self-talk about what you (or someone else) should do, must do, ought to do or not do. Often these 'shoulds' are voices in our heads that were planted when we were children. Although they seem to be helpful and the start of a behavior change, they often set us up for guilt and disappointment. If you can't trade the "should" for "want to", it's probably a negative message.

Example

I should lose weight. I should make my children eat 10 vegetables a day. I should stop looking at social media.

There are other mental habits that can lead us astray as well. Things like Control Fallacies where we see ourselves as either helpless victims of fate or in complete control of the world around us. Or the belief that we can force those around us to change to get what we want, or that there is only one right way to do things, or that life is fair and that everyone is always rewarded for their struggles and sacrifice. Humans are creative thinkers!

Remember!

1. Be aware; catch yourself when you are talking negatively to yourself or falling into these kinds of distorted ways of thinking.
2. Don't believe everything that you think! Be curious about where your negative self-talk and unhelpful mental habits are coming from.
3. Remember that you can take control of your thoughts; which will help you better guide your actions and your future.

Brain plasticity is a term that describes the incredible flexibility of YOUR human brain. **We are not stuck being ‘the way we are’.** But just knowing this information won’t make a change. And even positive thinking is not enough by itself. It takes good ideas and practical steps to make change happen. The brain is listening and ready to respond to your wishes, but it only changes with how you use it. **You can make changes and overcome habits of a lifetime. But to do this, you absolutely must take action repeatedly and consistently.** (Remember? To create new pathways, repeat, repeat, repeat.)

Here are 3 steps to making change, by using the awesome ability of your brain to change.

01 Get Real. Recognize your current path.

Hold up the truth mirror to your life and take a long hard look. Do you repeat the same mistakes in relationships? Do you do things over and over that have negative consequences for you? Look at your beliefs and how they affect your actions. You may have old, stuck ideas that have shaped your brain (and your reactions). Like a well-worn path from your house to your friend’s house, these beliefs and ideas cause your thoughts (and then your actions) to take the same route every day – even if the route takes you past dangerous dogs or through poison ivy! You’ve got to make a new path, even if it seems out of the way or awkward at first. Don’t just do what you have always done! Recognize where you’re stuck and figure out a new path to move your behaviour out of its usual rut.

02 Get Busy. Clear a new trail.

Creating new pathways in your brain takes effort. Your thoughts fall easily into well-worn paths (old habits). But you can reshape your brain by walking the new path over and over (and over) to create a new (and healthier) route. After a while, the new path will be clear, and the new habit will become easy and feel natural. Let’s say you want to get up in the morning and greet your family with a cheerful, happy attitude instead of that crabby, grizzly bear mood that you are typically in. Tomorrow, and every morning until it becomes a habit, force yourself to put on a big smile, put some energy into your voice, and be kind from the start. Do it again and again (and again), and you will create a new pathway in your brain.

03 Get Vigilant. Watch out for lures and traps

Old habits and negative behaviors have had a lot of traffic. They are well-worn tracks. It’s easier to follow a path that already exists than it is to hack a new trail in a different direction. Be vigilant about thoughts and actions that pull you back to the old track. Maybe your friend takes the old path every day and wants you to walk with him. Maybe you’re tired, and the old path is easier. Keep focused and plan ahead to deal with challenges. Get new friends to help you clear the path with you. Get more sleep so you aren’t so tired. Remember the rewards of forging a new life. Continue to think positively and practice your new habits. Positive thoughts (even if they feel ‘fake’ to begin with) lead to positive feelings, which leads to positive actions. As you hack a new trail through the fields and forests of your mind, the new path will become clearer and clearer and the old path will become overgrown and disused - until it becomes ‘the way you used to think and be’.

SELF-ASSESSMENT: Adaptability

PART A: CLARIFYING THE SKILL

1. What do you think of when you hear the word adaptability? Write your ideas below.

2. How do your thoughts above match with the following definition?

Adaptability is your ability to quickly adjust goals and actions to new situations or whenever change comes your way. For example, you're starting a new job, or you suddenly get asked to take on someone else's job because they are sick.

Being adaptable is important in all areas of our lives because nothing stays the same. It includes things like being able to plan (as much as possible) to see change coming, staying focused, and being able to keep trying to overcome setbacks. It also includes being able to decide what needs to happen next.

Being really adaptable means that you can keep calm and stay optimistic even when things are difficult. And you also use everything, even mistakes, as an opportunity for learning and growth.

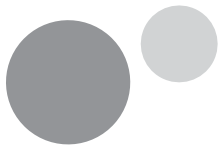
You can watch a video to learn more about this skill before you start.
canada.ca/en/services/jobs/training/initiatives/skills-success/video.html#h2.o2

PART B: SELF-REFLECTION

The self-assessment on the next page is based on a national skills framework that uses the definition you read above. It will give you an opportunity to think about the strengths you have already developed that show your ability to change and grow, and areas where you may want to build some skills.

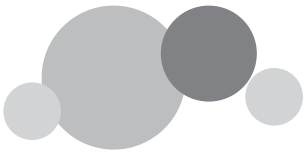
Read each statement in bold and put a check mark in the column that best describes how well you can do this. Think about all the situations in your life where you have had to persist, overcome, and adapt. It may be at home, at work, in school, or in hobbies.

You can also use the ideas underneath each statement to help you reflect on your skills and decide on a response. Highlight the specific things that you feel you are good at.



ADAPTABILITY SELF-ASSESSMENT	Yes	Somewhat	Not Really
1. I demonstrate responsibility.			
I am able to: <ul style="list-style-type: none"> • focus my attention on the current task and minimize distractions. • manage my time because I know it's limited. (e.g., I show up on time, I don't waste time.) • complete jobs that I'm given to show I'm dependable. 			
2. I can persist and keep going to get the job done.			
I am able to: <ul style="list-style-type: none"> • reflect on what's happened so far and look ahead to see when changes might be needed. • know when to keep trying or know when to change what I'm doing if things don't go according to plan. 			
3. I can regulate my emotions when needed.			
I am able to: <ul style="list-style-type: none"> • be positive and optimistic. • stay calm when I'm facing setbacks or recover if I lose it. • encourage other people to stay calm. 			
4. I set or adjust my goals and expectations when needed.			
I am able to: <ul style="list-style-type: none"> • set realistic goals and expectations based on my skills, available resources, and the supports available to me. • adjust my goals and expectations if needed. 			
5. I can plan and prioritize tasks to get things done.			
I am able to: <ul style="list-style-type: none"> • breakdown tasks, milestones, and strategies for reaching my goals. • decide which tasks need to happen first and how I can order all the tasks with the resources I have available. 			
6. I look for learning and self-improvement opportunities.			
I am able to: <ul style="list-style-type: none"> • reflect on my own skill sets and resources. • find opportunities for improving myself. • learn from setbacks and mistakes. 			

**The Self-assessment Checklists have been adapted from material created by Skills for Success and available on their website. canada.ca/en/services/jobs/training/initiatives/skills-success*



PART C: RECOGNIZING STRENGTHS

Adaptability Strengths:

Look at the “Yes” answers, or the statements underneath that you highlighted. Identify your strengths and write some in the space below. *(e.g. I am good at adjusting my goals and expectations as needed.)*

Areas for Growth

Look at the “No” or ‘Somewhat’ answers in PART B, or the statements underneath that you *didn't* highlight. Identify any areas you might like to strengthen or grow and write them in the space below. *(e.g. I would like to improve my ability to stay calm when I face setbacks.)*

Paths for Development

Think about the adaptability skills you would like to build or strengthen. Do you know anyone who is really skilled in those areas? Someone who you admire for their ability to adjust paths, stay calm and learn from setbacks? Write a little about them below.

How do you think you could help grow your own skills in this area? Write some of your ideas below. If helpful, talk to peers, your Facilitator or someone else in the program to get ideas.