9 Science-based Life Hacks to Improve your English Learning Potential PART 2 [971]

This is part 2 of a 2-part episode.

Please listen to part 1 first! That's where I covered the introduction for this episode, **Life Hack 1** - The importance of staying hydrated, and **Life Hack 2** - *The 1% rule*.

Let's now continue with the life hacks 3-9, plus a bonus one at the end…

3. Take a Power Nap - But Keep It Short (10–20 Minutes Max)

The problem

Mental fatigue builds up during the day and affects focus and memory.

The science

Short naps (under 30 minutes) improve alertness and memory without causing sleep inertia (grogginess). (NASA, 1995)

The hack

Take a 10–20 minute nap any time between 1–3pm.

This will

- Clear your mental cache
- Boost language retention
- Improve speaking fluency and reaction time

What do you think? Maybe you already do this. Maybe you think it's silly to consider having a nap as part of your language learning routine.

In any case, there are scientific studies which back this up.

The Science Behind Short Naps (10–20 Minutes)

Key Study: NASA Nap Study (1995)

Title: *Countermeasures for Circadian Desynchrony (there's a catchy title! Clickbait!!)*
Agency: NASA, in collaboration with the **Federal Aviation Administration (FAA)**

This is better, right? Learning from NASA astronauts, not cyclists. Flying through space is a bit harder than riding a bike, although imagine how confident you would have to be to take a nap while doing it.

Lead Researcher: Dr. Mark Rosekind, a sleep scientist at NASA Ames Research Center.

Findings:

- A **10–20 minute nap** improved:
  - **Alertness** by 100%
  - **Performance** by 34%

I have no idea how they measured alertness, or how they arrived at the figure of 100% but this is interesting.

These gains were observed in pilots and astronauts, but they generalise well to anyone doing mentally demanding tasks - like learning a language or preparing for public speaking.

NASA concluded that **short naps** are one of the most effective strategies for **counteracting fatigue**

(wow, it took NASA to work out that the best way to deal with tiredness is to have some rest).

Anyway… **short naps** are one of the most effective strategies for **counteracting fatigue** and maintaining high cognitive function, especially during long, mentally draining tasks.

What Happens During a Short Nap? (other than a bit of saliva coming out of the side of your mouth and maybe some snoring)

Minutes Asleep	What's Happening?	Benefit
0–10 minutes	Light relaxation, still semi-alert	Calms the nervous system
10–20 minutes	Light **Stage 1 and 2 sleep** (non-REM)	Boosts alertness, memory, and focus without grogginess
30+ minutes	Enter **slow-wave sleep**	Risk of sleep inertia - waking up groggy and disoriented

90+ minutes	Full sleep cycle (includes REM)	Useful for emotional processing and creativity, but not ideal mid-day unless you're sleep-deprived or just have nothing better to do with your time

Why Short Naps Work for Learners

When you're learning English, especially if you're:

- Doing mentally demanding tasks (listening, speaking, concentrating)
- Switching between languages
- Feeling frustration or fatigue…

...your **prefrontal cortex** (responsible for decision-making, planning, and working memory) gets tired. A short nap gives it a mini-reset.

Benefits backed by science:

- **Improved working memory** → better retention of new words or phrases
- **Sharper focus** → increased attention for tasks like grammar exercises or conversation
- **Reduced stress** → helps reduce cortisol and support emotional regulation
- **Faster reaction times** → useful in live conversations or comprehension tasks
  Or those moments when your teacher suddenly asks you a question in front of the whole class.

How to Use Naps Effectively

- **Duration:** 10–20 minutes max (set a timer!)
- **Best time:** Between 1pm and 3pm (your body naturally dips in alertness)
- **Location:** Quiet, dark, and cool if possible. That's cool meaning temperature, not cool like a jazz club from the 70s, although that could be a great place for a nap to be fair. Eye masks or earplugs help.
- **Position:** Reclining is ideal, but even resting your head on a desk can work - just, please, don't do it during one of my lessons.

Additional Research and Commentary

- **Mednick et al. (2002)**: Showed that **naps can be as effective as a full night's sleep** for improving motor memory and visual learning.
  I doubt that to be honest. Seriously, a nap can be as effective as a *full night's sleep*? Well, I can't argue with the science, but still…

- **Brooks & Lack (2006)**: Found that **10-minute naps had the most immediate benefits**, while longer naps had delayed or mixed effects due to sleep inertia.

- **Harvard Health Publishing**: Recommends naps for boosting alertness and performance, but cautions against napping too late in the day, which can disrupt nighttime sleep. I wonder how much time and money they put into researching that.

For English Learners Specifically:

Imagine doing this:

- Study vocabulary for 25 minutes
- Take a 15-minute nap
- Then review or practise the same material

You'll likely **remember more**, **feel calmer**, and **be more articulate** in your speaking or writing afterwards.

I suppose this relies on you having an appropriate place to nap. Sometimes I am desperate to nap, but I'm not really in an appropriate spot to do it. I have been known to nap for 10 minutes in the teachers' room, and people often comment on it.

In some cultures, public napping is more normal than others. I think I picked up the public napping thing from my time in Japan.
Did I ever tell you that I used to live in Japan? I was asleep for about 50% of my time there, and that's just napping hours.

4. Take a 5-Minute Walk Outside

The Problem:

Long periods of sitting and studying indoors reduce blood flow to the brain, limit sensory input, and increase mental fatigue. Over time, this can lower motivation, impair memory, and make learning feel frustrating or joyless.

The Science:

A growing body of research shows that **brief, low-intensity walking** - especially in natural environments - has profound effects on cognitive function and emotional wellbeing.

Cognitive Benefits:

Improved Working Memory & Focus

- A Stanford study (Oppezzo & Schwartz, 2014) found that participants who walked - even on a treadmill indoors - showed a **60% increase in creative output** compared to those who sat.

- The effect lasted even after they sat back down, showing that walking temporarily **boosts divergent thinking** and problem-solving.

Increased Blood Flow to the Brain

- Walking increases **cerebral blood circulation**, delivering more oxygen and glucose to the brain. This improves **alertness, reaction time, and concentration**.
- If there was some way to combine this walking with the previous point - napping, you'd be able to walk around your

neighbourhood and have a nap while you do it, potentially leveraging maximum compound cerebral gains in the process. Just a thought.

(Study: Ainslie et al., 2008 – walking leads to measurable improvements in middle cerebral artery blood flow velocity.)

Better Encoding and Recall of New Information

- A 2017 study in *Proceedings of the National Academy of Sciences* showed that **physical movement enhances hippocampal activity**, a brain region crucial for forming new memories - especially verbal and spatial ones. Learn English on your feet?

Emotional & Psychological Benefits:

Stress Reduction & Mood Boosting

- Walking outdoors, especially in green spaces, reduces **cortisol levels** and promotes the release of **dopamine and serotonin** - neurochemicals related to pleasure and motivation.

Study: Berman et al., 2012 – walks in nature improve mood and **reduce rumination**, a common feature of anxiety and overthinking.

Breaks Negative Thought Loops

- Even a short walk interrupts **mental spirals** or repetitive thoughts, helping learners come back to study with a calmer and clearer head.

Bonus: Nature Adds Extra Power

- Walking in a park, garden, or tree-lined street boosts the benefits even more.

- This is known as **"Attention Restoration Theory"** (Kaplan, 1995), which suggests that natural environments help your brain recover from mental fatigue much more effectively than urban or indoor spaces.

Practical Tips for Learners:

- **Do it between study blocks**: Use walking as a mental reset between language input and output (e.g., after studying grammar, before speaking).

- **Take English with you**: Listen to a podcast, describe what you see aloud, or repeat vocabulary as you walk.

- **Use it to calm nerves before speaking**: If you're nervous about a lesson, a meeting, or an exam, walk beforehand. The movement helps regulate your nervous system and boosts verbal fluency.

Even 2 Minutes Can Help

A 2020 study published in *Nature Neuroscience* showed that even **short bursts of light activity** (like 2–5 minutes of walking)

measurably improved mood and task engagement in adults - especially after long sedentary sessions.

Summary

Benefit	Why it matters for learners
Boosts creativity	Helps with expression and problem-solving
Improves memory	Strengthens vocabulary retention
Enhances focus	Reduces brain fog and distraction
Calms anxiety	Improves speaking confidence
Breaks monotony	Keeps motivation high and burnout low

What if You Can’t Walk in Nature?

Urban and Indoor Alternatives Still Work

1. Urban Walks Still Help

Even if your walk is along a busy road or through city streets, **movement alone still improves brain function**.

Studies show:

- The act of walking (anywhere) increases blood flow, releases dopamine, and improves memory and attention - even without nature.

- The Stanford study (Oppezzo & Schwartz, 2014) found that **indoor treadmill walking** had nearly the same creativity benefits as walking outdoors.

Try this

- Walk around your block, up and down the stairs, through a shopping centre, or even the corridor of your building.
- Carry earphones and listen to English input while walking.
- Focus on breathing slowly, noticing colours, smells, or textures - it activates your sensory attention system.

2. Use Visual Nature

If you can't go to nature, bring it to you.

Research says even *looking at images or videos of nature* has calming and restorative effects.

In a 2015 study (Bratman et al., Stanford), participants who viewed nature scenes (rather than city images) showed **lower anxiety levels and reduced activity in the brain's "rumination centre."**

Try this:

- Play a YouTube video of a forest or beach walk on your screen as you stretch or pace indoors.
- Use a nature-themed screensaver or phone background.
- Look out the window if there's *any* greenery or sky.

3. Indoor Walking or Pacing

Even walking around your apartment or pacing back and forth **counts**. You're still:

- Engaging your motor system
- Activating your brain's hippocampus (linked to memory and learning)
- Breaking up sedentary time, which improves alertness

Make it productive:

- Shadow short English phrases while pacing (repeat out loud)

- Recall and say 5 new words you learned today
- Practice small talk out loud as you walk around your space

4. Movement Substitutes for Brain Refreshment

If walking really isn't possible, **any kind of light physical movement** can give similar benefits.

Try:

- Stretching
- Gentle yoga
- Light dance (even just swaying to music)
- Stepping in place for 2–3 minutes
- Standing up and reaching your arms above your head (activates vestibular and proprioceptive systems)

All of these help with:

- Releasing muscle tension
- Improving circulation

- Resetting your mental state

5. Combine Micro-Movement with Language Practice

Even with limited space, you can:

- Walk in place while reviewing flashcards
- Do 10 toe touches between grammar questions
- Stretch while listening to an English podcast
- Stand up and explain a topic aloud instead of writing it

This blends physical and mental activity - great for **retention, confidence, and energy**.

The bottom line

You don't need a forest. You don't need 10,000 steps.
You just need **to move a little, reset your brain, and re-engage your senses**.

Even if you:

- Walk in a small circle indoors
- Look at a tree from a window
- Pace with a podcast in your ear
  ...you're still activating the same cognitive and emotional systems that support English learning.

Just a thought - presumably, this also works for cycling. Here we go again.

Imagine the gains you could make by taking a nap with a great pillow, then washing your hands and going for a refreshing bike ride. You won't actually need to study English at all with that routine!

I'm kidding. I said earlier that these aren't specific study tips (listen to 959 for that) but little lifestyle hacks, right?

5. Splash Cold Water on Your Face

This is basically the solution to any problem I think. That and just having a cup of tea.

Lost your job? Splash some cold water on your face!

Got a job interview coming up? Splash some cold water on your face.

Didn't get the job? It's ok. Splash some more cold water on your face.

Got a permanently cold and wet face? Simply splash some more cold water on your face and have a cup of tea. Everything will be fine.

Let's try to take this seriously.

The problem
Stress and panic before speaking freeze your brain.

The science
Cold exposure activates the "diving reflex," which slows your heart rate and calms the nervous system. (Panneton, 2013)

The hack
Splash cold water on your face for a few seconds before a stressful moment (e.g. a conversation, exam, or interview).

It's quick, natural, and instantly resets your nervous system. (That's quite a big claim, isn't it?)

More details.

The Diving Reflex: What Happens When You Splash Cold Water on Your Face?

The **mammalian diving reflex** (sometimes called the "dive response") is a natural, **oxygen-conserving survival mechanism** triggered by **cold water contacting the face**, especially around the eyes, nose, and forehead.

This reflex is most pronounced in aquatic mammals (like seals and whales), but humans still retain a strong version of it.

OK this makes sense.

What Happens Physiologically?

When cold water (below ~21°C / 70°F) touches your face:

1. **Trigeminal Nerve Activation**
    - Cold receptors in the skin (particularly around the forehead and nose) stimulate the **trigeminal nerve**, one of the major cranial nerves.
    - This sends a powerful signal to the **brainstem** that your body is entering a "survival mode" and must conserve oxygen.
2. **Slowing of the Heart Rate (Bradycardia)**
    - The brain responds by **reducing heart rate**, sometimes by 10–25%, to preserve energy and oxygen for vital organs.
    - This calming effect is **immediate and measurable**.
3. **Peripheral Vasoconstriction**
    - Blood vessels in the limbs constrict, redirecting blood to the brain and heart.

- This maintains blood pressure and protects the brain's function during moments of stress.

4. **Shift from Sympathetic to Parasympathetic Dominance**

    - The sympathetic nervous system (fight or flight) is dialled down.

    - The **parasympathetic nervous system** (rest and digest) takes over - slowing breathing, calming thoughts, and restoring a feeling of control.

So, basically - bring a bowl of cold water to your IELTS speaking exam.

"Sorry, I'm just triggering my Trigeminal Nerve sending a powerful signal to my brainstem and activating my Peripheral Vasoconstriction to maintain blood pressure causing a shift from sympathetic to parasympathetic dominance. Just to make sure I don't forget any phrasal verbs or grammar or anything.

I am sure the examiner will understand.

Scientific Evidence and Research

Panneton (2013) – "The Mammalian Diving Response: An Enigmatic Reflex to Preserve Life?"

- Panneton found that the diving reflex triggers a **multi-system survival response** that **protects the brain and heart under stress**.

- Demonstrated how **cold stimuli on the face** activate pathways in the **nucleus tractus solitarius (NTS)** - a part of the brainstem that regulates heart rate, breathing, and blood pressure.

"This reflex, though largely overlooked, provides an effective autonomic shift that can be therapeutically harnessed to reduce anxiety, panic, and even cardiac arrhythmias." – Panneton

Research in Anxiety & Panic Regulation

- Studies in emergency medicine and trauma psychology have explored how the diving response can **counteract acute panic symptoms**.

- One study (Facer-Childs et al., 2017) suggested that **immersing the face in cold water** led to **rapid decreases in perceived stress and subjective tension**.

Why It's Useful for Language Learners

Moments of speaking English - especially in front of native speakers, during tests, or public presentations - often trigger:

- Fast breathing
- Rapid heart rate
- "Mind blanking"
- Difficulty retrieving vocabulary

We've all been there.

These are classic signs of a **sympathetic nervous system spike** (fight/flight response).

A “sympathetic nervous system” - I like that idea. Your nervous system is sympathetic, and says “Ohhh poor you, you’re feeling stressed, let me control your blood pressure and reduce your fight and flight response for you, and how about a nice hot cup of tea? Or a cold splash of water in your face?”

Cold water to the face can help to quickly flip those stressful moments - it helps learners:

- Regain calm and composure
- Slow racing thoughts
- Speak more clearly and confidently

How to Use This Technique Practically

Always carry a bottle of chilled water with you!

Splash & Reset (Low Effort)

- Splash cold water over your face for **10–30 seconds**
- Focus on the water hitting your **cheeks, nose, and forehead**
- Dry your face and breathe slowly

Ice Pack or Cool Cloth (No sink needed)

- Press a cold, damp towel or an ice pack to your face
- Hold for 20–30 seconds while breathing deeply

Combine with Box Breathing (more on this later)

- After splashing, sit quietly and use **box breathing** (inhale–hold–exhale–hold, each for 4 seconds)
- This doubles the calming effect

The only problem is - *you will have a wet face.*

That might be a bit of a problem during an IELTS speaking test or job interview.

But seriously though, this does work and genuinely can help you to calm down and do your best.

Also, holding a cold bottle in your hands can help you to cool down, which helps to prevent blushing. Just ask communication expert Matt Abrahams from episode 879.

https://teacherluke.co.uk/2024/04/22/879-think-fast-talk-smart-communication-techniques-for-spontaneous-speaking-%ef%b8%8f with-matt-abrahams/

6. Write It Down: Use Your Journal as a Memory Backup

The problem: Our working memory is limited. Trying to remember everything creates cognitive overload.

The science: Writing information by hand improves recall and deep learning. (Mueller & Oppenheimer, 2014)

The hack: Keep a "Language + Life" journal. Use it to:

- Record new vocabulary
- Reflect on your progress
- Express how you feel in English
- Record and use new bits of English you have learned or noticed

Writing by Hand: Why It Supercharges Your Memory

The Problem

Typing notes or passively reading often leads to shallow learning. Many learners copy things mechanically, but forget them quickly. They also skip reflection and rarely engage with new language deeply enough to make it stick.

The Science: Writing by Hand Improves Learning

Mueller & Oppenheimer (2014)

Study Title: *The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking*
Published in: *Psychological Science*
Core finding:

- Students who **took notes by hand** (vs. on a laptop) **performed significantly better** on both factual recall and

conceptual understanding.

- Handwriting forces you to **process and reframe** the information in your own words - not just transcribe it.

"Taking notes by hand requires different types of cognitive processing, and these different processes lead to better learning." - Mueller & Oppenheimer

Why Handwriting Works So Well (Neurological Reasons)

1. Engages More of the Brain

- Handwriting activates **visual, motor, and cognitive areas** of the brain - including the **sensorimotor cortex**, **prefrontal cortex**, and **language centres**.

- This **multi-sensory engagement** strengthens memory encoding and retrieval.

Study: James & Engelhardt (2012) found that children who learned letters by handwriting showed **greater brain activation** in reading-related areas than those who learned by typing.

2. Promotes Deeper Processing

- You can type verbatim, but you can't *handwrite* everything at the same speed - so your brain is **forced to summarise, reformulate, and select** key information.

- This encourages **"generative note-taking"**, which supports *long-term understanding*.

3. Increases Focus and Reduces Distraction

- Laptops and phones are multitasking traps. Handwriting is *single-tasked and tactile*.

- You will probably stay more engaged and less tempted to skim, switch, or scroll on other platforms.

Practical Tips for English Learners

Even a few minutes a day of handwriting can yield real benefits. Here's how to apply it.

1. Keep a Learning Diary

- Write one short paragraph a day about what you learned, how you felt, or what confused you.
- Use new grammar and vocabulary, even if it's imperfect.

E.g., "Today I learned the word *overwhelmed*. I felt a little overwhelmed when I spoke to the teacher, but I survived!"

2. Write Vocabulary in Context

- Don't just write lists. Write **full sentences or examples** with each new word.
- E.g., "*To stumble*" *– I stumbled when I tried to explain my idea in English, but the teacher understood.*

3. Rewrite Sentences from Memory

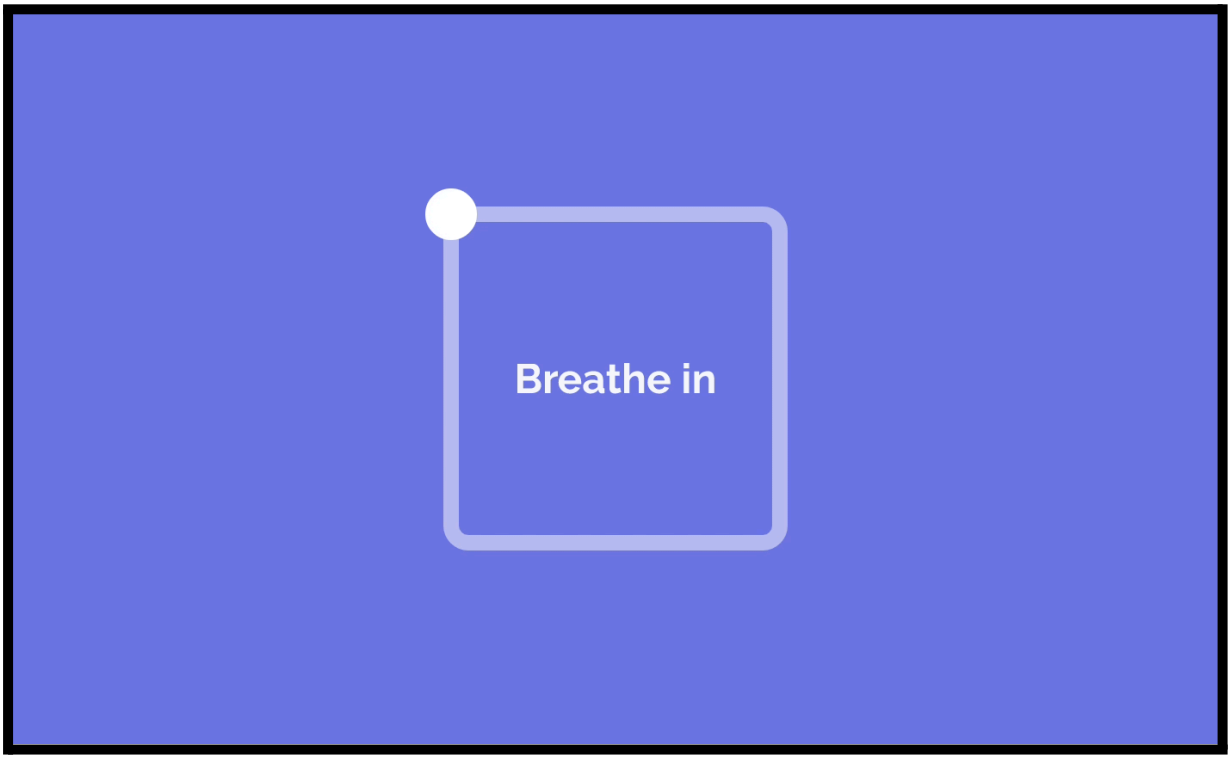
- Read a short passage, close the book, and **try to write it again from memory**.
- This builds active recall - one of the most powerful ways to lock language into your brain.

4. Use Pen and Paper Flashcards

- The physical act of flipping cards and handwriting answers (vs. tapping) improves **spatial memory** and **kinesthetic reinforcement**.
- Use the *Leitner system* (spaced repetition) for extra power.

5. Write Mind Maps or Word Webs

- For grammar, vocabulary sets, or idioms - draw them out.
- Linking words visually helps the brain store them in "clusters," which improves retrieval speed during speaking.



7. Box Breathing: Regain Calm and Control

This is basically the old classic bit of advice, “Don’t forget to breathe!” which could go in the same category of obvious advice such as “don’t have an accident!” and “Just be yourself”.

But really there is a bit more to it than that.

The problem: Panic causes fast, shallow breathing - and your brain shuts down non-essential functions like language.

Apparently language is non essential.

The science: Controlled breathing activates the parasympathetic nervous system, reducing stress and improving cognitive performance. Used by Navy SEALs and first responders.

Well if Navy SEALS do it then it must be brilliant, right?

Navy SEALS are really good at breathing. In fact maybe they are the best, or even the best of the best at breathing … and killing.

Killing and breathing.

Let’s focus on the breathing shall we?

The hack: Try **Box Breathing**:

- Inhale (4 seconds)
- Hold (4)
- Exhale (4)
- Hold (4)

  Repeat for 1–3 minutes.

Before speaking or studying, this simple method lowers anxiety and improves your speaking ability.

I actually use this all the time just to take a moment to calm myself, and it helps me sleep. If I just breathe really deeply and slowly for several minutes, I often just fall asleep eventually.

This seems like common sense - but think about it, how often do you actually do this specific exercise?

Obviously we all breathe all the time. Are you breathing right now? You should be. If you're not breathing, something might be wrong. You might have turned into a skeleton with headphones on.

But consider your breathing. A lot of the time if we feel tense our breathing is shallow and tight. It's worth being mindful of that and doing some box breathing to help you stay calm.

I started doing it recently and have found it helps quite a lot. If I can't sleep at night, and my thoughts are racing - I do exactly this, over and over, and it often results in me drifting off to sleep.

Also, in other stressful moments, like before a class, or stand-up, or if I'm trapped in a train full of snakes or something like that.

Try it!

Inhale (1, 2, 3, 4)
Hold (1, 2, 3, 4)
Exhale (1, 2, 3, 4)
Hold (1, 2, 3, 4)

Sometimes I wonder if people who smoke cigarettes say they feel relaxed when they smoke - because they take a little break from what they are doing and basically just breathe for a while.

I know - it's really unhealthy breathing, but they do just stand there and breathe.

Think of box breathing like smoking an imaginary, but very healthy, cigarette. Just an idea. One for the stressed-out ex-smokers.

8. Talk to Yourself (Yes, Really)

Speaking to yourself - often dismissed as a bit odd - is actually a **brilliant language-learning strategy**, and it's backed by solid research. It's called **self-explanation.**

The problem: No speaking partner? No practice.

Solution: Try speaking to yourself. I'll explain how in a moment.

The science: Self-explanation improves cognitive flexibility and language acquisition. (Chi, 2000)

Speaking to Yourself: Why It Works for Language Learning

What is self-explanation?

Self-explanation is the process of **explaining things aloud to yourself** while you're learning or practising a skill. It's like narrating your thoughts, actions, or what you're trying to understand - in this case, in **English**.

The Science: Chi (2000) and Beyond

Chi (2000) – Self-explaining: The dual processes of generating inferences and repairing mental models

- This research found that **students who explained things to themselves while learning** retained more information and understood it more deeply.

- It worked even if no one was listening - the act of explaining helped them process the information more actively.

> "Self-explanation prompts learners to integrate new information with what they already know, leading to better understanding." - Chi

Why It Works for Language Learning

Self-explanation strengthens:

- **Cognitive flexibility** – the ability to switch between different ideas or language rules

- **Metalinguistic awareness** – being aware of grammar and structure while you're using the language

- **Memory encoding** – explaining helps the brain store language in **connected networks**, not isolated facts

- **Confidence** – because you practise forming sentences aloud without pressure

Other studies (e.g. **Wylie & Chi, 2014**) found that self-explaining is especially useful in **problem-solving tasks** - like figuring out which tense to use, or how to form a question.

I always encourage my learners to say sentences out loud in order to see how they sound.

Examples of Self-Explanation in Practice

Here's what it might sound like when a learner uses self-explanation in English:

- "Wait - do I use *'since'* or *'for'? Hmm. *Since* is for a specific point in time - like 'since Monday'. Right."

- "I don't know the word for this, but I can say *'the thing you use to…'*. That works for now."

- "I'm not sure if *'funny'* is the right word here - maybe '*eerie'* is better?" (because you're describing something creepy and strange) "The woods felt eerie"

This turns passive study into **active problem-solving**.

Why Speaking to Yourself Is Especially Useful for Language Learners

It helps with:

Skill	How Self-Talk Helps
Speaking fluency	Gives you safe, private practice time
Grammar awareness	Lets you "think aloud" about language rules
Vocabulary recall	Helps pull words from memory and use them in context
Confidence building	Low-pressure way to get comfortable producing language
Pronunciation	Lets you hear your own voice and improve how you sound

Tips to Practise Self-Explanation in English

1. **Narrate your actions**

   "Now I'm making tea… I'm pouring water into the mug… I'm adding honey…"

2. **Talk through a problem**

   "Why is it *'I was going to call'* instead of *'I am going to call'*? Oh, it's because I didn't do it - it's in the past." (easy example)

3. **Summarise what you just learned**

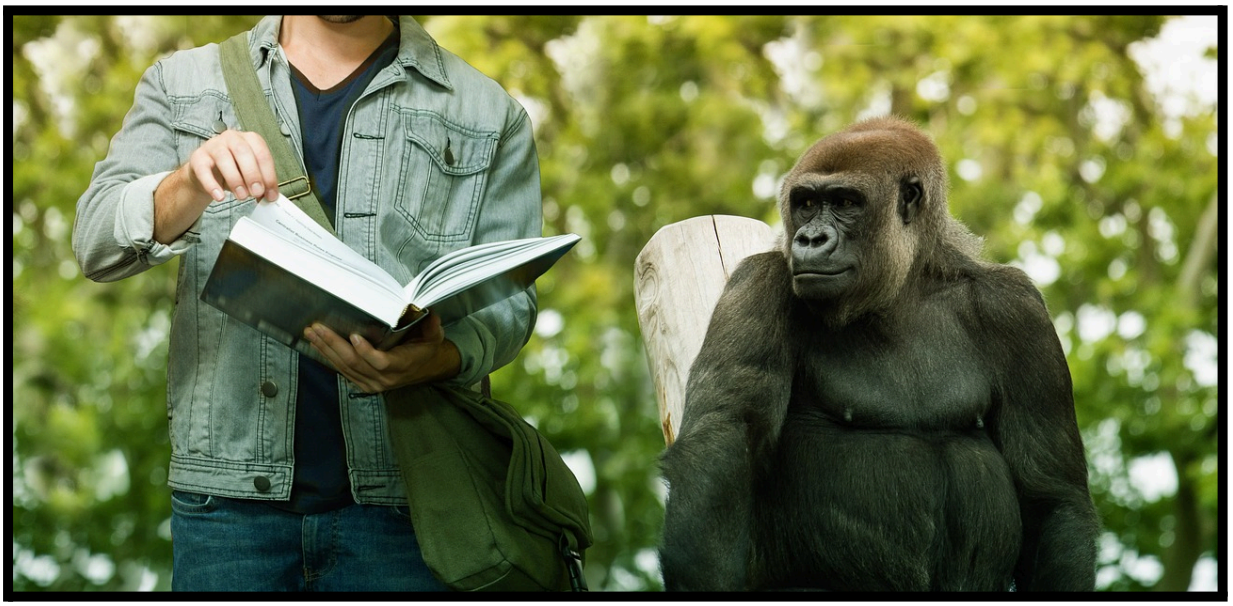
   "Today I learned that *must* and *have to* are basically the same (You must do this homework before the next class - you have to do this before the next class) but *mustn't* and *don't have to* are different. "You mustn't smoke here" and "You don't have to pay. It's free."

   Reflect on your performance

   "I forgot the word *'appointment'* today in class. I'll review it again later."

4. **Describe something around you**

   "There's a yellow book on the table. The window is open. I can hear cars outside."



9. Teach What You Learn

Sometimes becoming a teacher is the best way to be a great learner.

The problem

Passive learning doesn't guarantee results, but the "protégé effect" shows that teaching helps us retain more because we organise and explain knowledge clearly. (Bargh & Schul, 1980)

Here comes the science bit.

The Protégé Effect: Why Teaching Helps You Learn Better

The **protégé effect** is the phenomenon where **people learn information more deeply when they teach it to someone else**, or when they **prepare to teach** it.

Even if no one is actually listening, the act of **explaining** forces the brain to

- **Organise thoughts**
- **Clarify understanding**
- **Fill knowledge gaps**
- **Use memory actively**

The name comes from the idea of having a **protégé** (someone you mentor). When you take on the role of teacher, even temporarily, you shift from **passive** to **active** learning.

Bargh & Schul (1980)

In their foundational study, Bargh and Schul explored how the **intention to teach** changes how we process information.

Key finding of the study

Participants who expected to teach a topic learned it more thoroughly than those who only expected to be tested on it.

They retained more, understood it more deeply, and were better able to apply the knowledge.

This effect has been **repeated in many studies since**.

More Supporting Research

Fiorella & Mayer (2013) – *The relative benefits of learning by teaching and teaching expectancy*

- Learners who **taught others** retained significantly more than those who simply studied or rehearsed the material.

- Even **just preparing** to teach improves engagement and understanding.

Nestojko et al. (2014)

- Participants who believed they'd have to teach (but never actually did) **outperformed** those who were told they'd be tested.

Why is this? Because they processed the material more actively and deeply.

> "Preparing to teach may instill a sense of responsibility, which in turn increases motivation and cognitive engagement." – Nestojko

What Happens in the Brain?

When you teach

- You access **long-term memory**
- You use **retrieval pathways** (ways of pulling out information that you know - recall or retrieval is an essential part of remembering things long-term)
- You strengthen **connections between ideas**
- You engage both **linguistic and metacognitive skills** (language skills but also skills that involve thinking about your thinking and language use)

This is similar to point 8 about speaking to yourself, but with the added cognitive push of having the specific focus of explaining something.

It's essentially **"learning by output"**, not just input, which I have always said is an important part of the process - you don't just

have to get language into your brain, but out again - from your mouth or via your hand(s).

Learning English is not about what you know, it's about what you can do.

So when you learn something, you have to learn how to use it. Teaching someone what you are learning is a way to make that happen, and also helps you embed the language deeper into your mind.

How You Can Use the Protégé Effect

You don't actually need students - you just need to act like a teacher.

Easy Ways to Apply This:

1. Explain new words *aloud*

- "Today I learned the word *demanding*. It means when something or someone needs a lot of work, mental effort, physical effort - a demanding job, a demanding boss, a demanding customer."

- Saying it aloud, as if to a friend, makes it stick.

2. Teach grammar rules to an imaginary learner, or just to yourself

- "The past perfect is used when one past event happened before another. For example: *I had already eaten before he arrived.*"

- You could even use a teddy bear, a figure of Yoda (he needs the grammar practice) or a volleyball with a face on it that you could name “Wilson” if you like.

3. Record a voice message explaining what you learned

- Just 30 seconds: “Here’s what I learned today...”

- Play it back and self-correct
- Keep your notes in a learning library, or as part of an oral learning diary

4. Write mini-lessons or posts

- Instagram, a journal, or language forums (like Reddit) even if you don’t post them

- Producing even just 1–2 sentences explaining an idiom or phrase helps reinforce the learning

5. Study in pairs and swap teacher roles

- One person teaches a phrase, the other tests or asks questions

- Use this for grammar, pronunciation, or vocabulary

The **best way to learn something** is to try explaining it **as if you were teaching it** - even if you’re just talking to your cat or your

phone. You don't have to be an expert to do this, because it is the *process* of doing it that helps you learn more deeply.

The best learners are prepared to think outside the box and do things that most 'normal' people wouldn't consider doing.

Be a true LEPster. Be *abnormal*.

BONUS POINT: Accept That English Is a Journey, Not a Destination

I could have added this as point 10 in my list, but I wanted an odd-numbered list because people seem to find them more appealing.

It's a funny quirk of human psychology. It seems that *even numbers* (2, 4, 6, 8, 10) feel more stable and symmetrical. They often feel finished or static to our brains.

Odd numbers (1, 3, 5, 7, 9), on the other hand, create a subtle sense of tension and movement that we find much more engaging.

But anyway the bonus point in my list is this:

Accept that learning English is a journey, not a destination

The problem
You feel like you're failing because you haven't reached perfection, or you haven't made huge, tangible steps in your progress, recently.

The truth
It's worth remembering that native speakers also forget words, make mistakes, or struggle to express themselves, even if they seem to be speaking "perfectly".

Nobody has really mastered the English language. Even Shakespeare had the advantage of being able to write it all down in his own time, and no-doubt edit and improve his manuscripts as he went along, and probably had help from other people.

Stand-up comedians who appear to be flawlessly fluent and funny on stage are not doing it spontaneously. They've said those exact sentences over and over again. Nobody is able to speak flawlessly with perfect fluency. We all stumble, make false starts, say "err", and communicate badly at times. So, don't expect to completely avoid those things as a learner of English. Accept them.

Fluency can be a messy process. That's okay. Be careful not to set standards for yourself which are so high that you are setting yourself up for disappointment because you don't stand much chance of achieving them.

Also, we often make progress without realising it, especially when we reach the intermediate plateau.

In the early stages of your learning of English, you might make some quite significant leaps in progress, or perhaps after certain experiences - making friends in English, socialising in English, being immersed for a while (maybe because you had a great formative experience like time living in an English speaking country)

- and these experiences cause us to experience a leap in our progress, and then after that we feel like we are not making similar leaps or steps forward.

We always look back at that special time when we made big progress, and judge our future language learning by that standard.

But it's well-known that learning English involves quite a lot of progress at the start and then a slowing down or a kind of plateau when you hit the intermediate level, which lasts all the way through to C1 or further. This is where you start to get to grips with the nuances of grammar, vocabulary and pronunciation in your long journey towards advanced English, and beyond.

Try not to judge your current progress by how you perceive your English journey in the past, unless of course you are feeling positive about how you are better than before - there's nothing wrong with that. But beware of comparing your current rate of progress to times in the past when your rate of progress was faster.

Am I explaining myself here or just rambling?

The point is - it is about the journey, and not the destination.

Just like when you are travelling somewhere by car and the journey is 5 hours long. If you keep checking the clock, keep checking the navigation map to see how long is left, it will feel like the journey is going incredibly slowly, and this is not the point.

Just ignore the clock, the progress bar, and live in the moment, enjoy what you are doing now. Look out of the window and enjoy the view, or just enjoy whatever interaction with English you are having right now.

If you are spending time with English, listening to it, absorbing it, using it, practising it, then these things will be having an impact under the surface, and it's a matter of continuing almost with a sense of blind faith - just being patient and persevering. Your English will bear fruit eventually.

The Science Behind "Accepting That English Is a Journey, Not a Destination"

1. Growth Mindset Theory

Carol Dweck (Stanford University) is the leading researcher behind the concept of **mindset** in learning.

Learners with a **fixed mindset** believe that ability is something you're born with - you're either "good at languages" or not.

When you look at others and consider them just to be better than you, you might conclude that they were just born with it, but you were not, and that's that. That's an example of a fixed mindset.

Learners with a **growth mindset** understand that ability develops through effort, mistakes, and persistence.

Key finding
Students who believe that progress takes time and effort **perform better**, handle failure more constructively, and **stick with difficult tasks** longer.

Source: Dweck, 2006 – *Mindset: The New Psychology of Success*

I bet also that students who don't compare themselves to others too much, also persist and make better progress long term.

How this applies to English learning

- Accepting that fluency takes time will help you stay motivated, even when progress is slow.

- It encourages you to **see mistakes as part of learning**, not signs of failure.
- I think it could also support the idea that everyone has their own path and that you are on yours, and other people are on theirs and therefore you shouldn't really judge yourself against the success of other people. Just do you.

  Also, don't be too quick to judge other people, point out their mistakes, or generally criticise other people's level of English, because that's just not very nice and I don't think it helps you improve your English.

Plus, hatred is the path to the dark side. (that's what Yoda said anyway)

I know his grammar is normally pretty bad, but he is wise.

2. The “Intermediate Plateau” and Non-Linear Progress

Language learning doesn’t happen in a straight line. Many learners experience what’s called the **intermediate plateau** - where early gains are fast, but later improvement feels slow or invisible.

Research from applied linguistics and SLA (Second Language Acquisition) shows that:

- **Fluency develops gradually and unevenly.**

- Learners often **improve internally** (better comprehension, mental processing) **before it becomes visible externally** (speaking more fluently).

  “Language acquisition is often silent before it becomes spoken.” – Stephen Krashen

Understanding this helps learners avoid unrealistic expectations and **stay the course** even when visible progress stalls.

This is what I mentioned earlier. Don't give up. Keep going, even if you feel like things aren't really happening for you.

"The darkest hour is just before dawn."

3. Self-Compassion Boosts Learning Persistence

Psychological studies show that learners who are **kind to themselves**, especially after setbacks, are:

- **More likely to keep trying**
- **Less likely to give up due to perfectionism**
- **Better at managing stress and anxiety**

Neff et al. (2007) found that **self-compassion was a better predictor of academic resilience** than self-esteem.

Learners who say, "It's okay, I'm learning" or "Everyone makes mistakes" are **more likely to keep going** than those who say, "I'm terrible at this."

I would extend this to compassion for others too.

Study: *Crocker & Canevello (2008)* found that individuals who pursued "compassionate goals" (e.g. helping others, showing understanding) reported **lower levels of stress**, **greater self-efficacy**, and **better interpersonal relationships**.

So, think twice before judging and criticising others for their English errors. It doesn't magically make your English any better. In fact, quite the opposite, it seems.

4. Even Native Speakers “Fail” All the Time

This might seem obvious, but it's reassuring to remember:

- Native speakers forget words
- Use incorrect grammar
- Struggle to express complex ideas
- Make “ums,” hesitations, and weird sentence constructions daily
- “Native speaker” isn’t a language level. There are plenty of native speakers who would get poor results in the IELTS test.

This isn’t to just make you feel better about yourself by reminding you that native English speakers can be idiots, but rather to make you reconsider your standards for being “good at English”.

Setting up some mythical idea of perfection is not healthy for you.

In fact, **corpus linguistics** (the study of real-world language) shows that:

- Spoken English is full of **false starts, rephrasing, and ambiguity**

- Most people use a **limited core vocabulary** in daily life

Accepting that can help you let go of the myth that "no errors = perfection" and focus instead on **communication, connection, and clarity**.

The hack: Redefine success as consistency - not perfection.

One phrase a day. One new insight a week. One step forward. Enjoy the journey. Try not to judge yourself by past successes. Don't compare yourself to others. Keep calm, and carry on!

Final Words

With the right strategies, it is possible to reduce stress, increase focus, and make real progress - even on those difficult days when you don't feel 100%

So, next time you feel blocked, tired, or unsure, remember:

- Drink water.
- Take a walk.
- Have a power nap.
- Splash some cold water on your face.
- Write some things down.
- Breathe slowly.
- Speak out loud.
- Teach what you're learning to someone else (or just imagine that you have to)
- And of course → Listen to LEP

But *not all at the same time*.

But really

- Enjoy the journey
- And aim for just 1% better than yesterday.

Oh, and subscribe to LEP Premium 😉