Pearson

Learning to Learn

Supporting digital learning for adults

This guide is suitable for all learners
(16+ years onwards) learning online.

Contents

Advantages and Benefits of Learning Online

- Get the best outcome

- Reduce the mental effort (cognitive load)

- Greater ability to concentrate

- Gain better critical-thinking skills

- Personalise your learning

- Learn in bite-size pieces

- Learn without becoming overwhelmed

- Engage actively not passively

- Learn at your own pace and according to your learning style

Online Learning Approaches

We all learn in different ways and styles. Let's explore a few of these as well the science and techniques behind these approaches that you can apply it into learning at your own pace.

Learning Techniques
- Interleaving →
- Spaced learning →
- Retrieval →

Learning Techniques

Interleaving

Selecting different elements to combine your learning

Benefits

- It helps you to keep more in your memory
- Mixing different topics into learning each day
- Recall a topic and retain it for longer
- Helps you to master the topic
- Strengthen the knowledge pathways
- Achieves better results

Science

- Moving learning between short-term and long-term memory
- Each time you start a topic, it comes forward to short term memory
- Once you have learnt it goes back to long-term memory

Techniques

- Make a timetable
- Mix up the topics that are similar just like different varieties of apples but not apples and pears
- Not jump from one topic to another every 5 mins, let it reach your long-term memory first
- Strengthen one knowledge pathway before creating a new one

Example

Learning new language vocabulary-learn words from different topics such as food on the menu, fruits, drinks and not just what you need for going on the holiday. Mix up each of these topics in a different order each day.

Spaced Learning

Planning and spreading your learning over time

Benefits

- It helps you to have a long-lasting learning same as long lasting memory when you go out and enjoy a holiday and see new places over a week rather than seeing everything in one short day.

- Each time you go back to study, you reinforce your learning as you relearn in a different way

Science

- Simply giving time to the brain to embed information into long term memory

Techniques

- Start on a topic, learn and then leave it for couple of days before you revisit. Next time revisit after 3 days and then 4 days. Increasing the periods in between helps you to learn and store effectively.

- Do not leave the topic for too long until you have established it well

- If you didn't understand the topic fully, don't do it again on the same day, take a break and then go back to it.

- Revisit the topic each time in a new way for example, make notes, annotate a picture or do a mind map

- Don't just repeat the assessment if you didn't succeed the first time, do some further learning, and then do the assessment

- Use spaced learning in combination with interleaving and Retrieval

Example

One of the methods that is commonly used for spaced learning is by creating flashcards and organising them in a box with a schedule of revisiting daily, weekly, fortnightly, and monthly.

Once you answer a card correctly, it can be put into a section that you will revisit less frequently in the future. However, if you answer a card incorrectly, it will need to be moved into a section for revisiting in the future.

Retrieval

Not about getting information in but about getting information out

Benefits

- Useful when preparing for assessments
- Requires less input and more output
- Bringing information back to mind improves and enhance learning

Science

- When you learn something new, it stays in the short-term memory (top drawer) and when you learn it using interleaving and spaced learning, it gets encoded and slowly moves it down to the long-term memory (bottom drawer)
- Digging deep into your long-term memory (bottom drawer) where you also store all the memories and facts along with the useful information
- The more you retrieve, the stronger the pathways. Same as going to a new place for the first time or going again and again. It becomes easier each time.

Techniques

- Top tips for recalling or retrieving
  - Use flash cards
  - Quiz yourself
  - Talk the answer aloud
- Create a playlist of the topics where you got didn't do so well in your quiz or assessment
- Revisit the play list and repeat the quiz later when you have done a bit more learning
- Do not give up, keep trying

Personalise your Learning

Where learning is tailored for each learner based on their strengths, needs, skills and interests.
It is all about you taking control of the learning materials, where you wish to learn those and
how - or you could say it is more like having your personal tutor at hand all the time.

Benefits

- Offers more choice to you as a learner

- Pace of learning can be adjusted to suit your needs rather than the needs of the whole class and timetable

- It offers a positive and enjoyable experience to you and encourages positive interaction between you and your teacher/coach

- Offers you a targeted support

- Offers you the opportunity to master one subject/topic before you are ready to move on

- Helps you to develop strong social and emotional skills through expression of your needs and choices you make to plan your own educational journey/learning path

- You also learn how to plan, organise, set your goals, demonstrate motivation and reliability, reflective learning and helping yourself, all the skills essential for the future.

- Students with certain weaknesses can learn without any stigma.

Tips

- Take active part in your learning journey,

- Set your own goals and your own personal learning plan

- Engage with tutors at checkpoints to review your learning and progress

- Make use of self-assessment for each topic

- Build your own Personalised learning playlist i.e. choose types of learning activities to suit your needs such as individualized learning, groupwork, including digital content or peer work.

- Build your own Personalised learning pathways i.e. career related internship, apprenticeship, full-time study, or part time study

- Make use of digital technology and tools to enhance your experience

- Look, listen and respond to the feedback

Learning Through Reflection

Reflection often means carrying out critical assessment of how we can improve our performance.
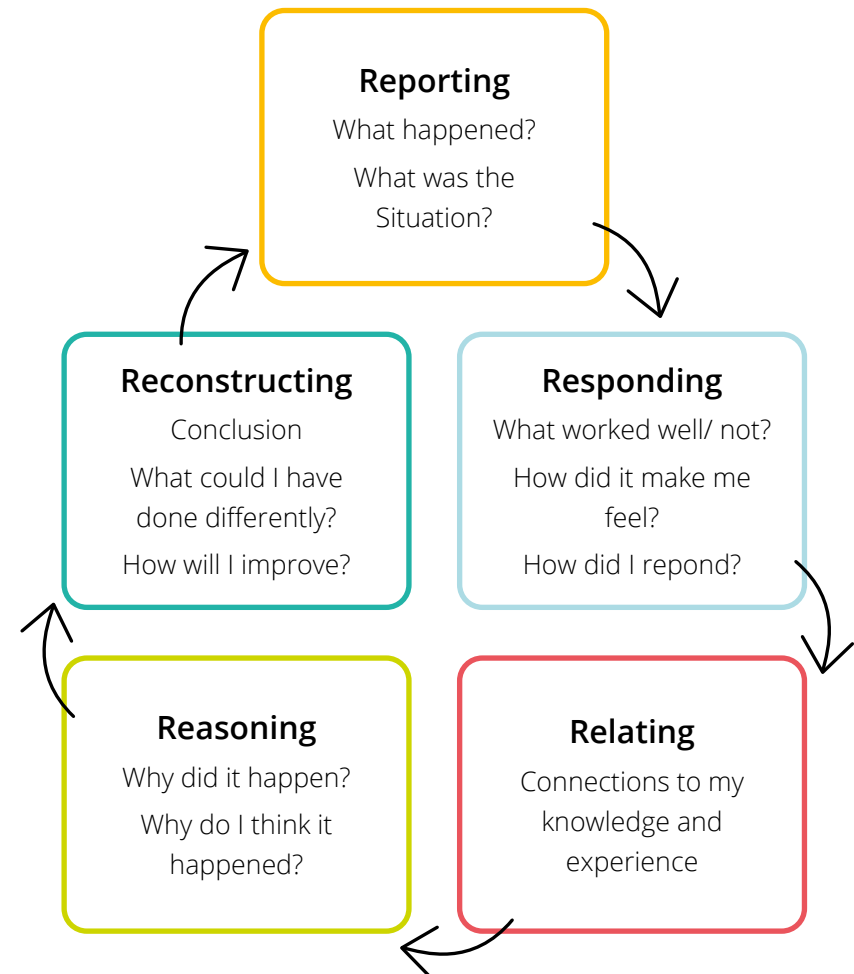
"Learning is not doing; it is reflecting on doing" Henry Mintzberg

Benefits

- It allows learners to step away from the learning and develop critical thinking skills. Reflections encourage us to look back and learn from the past and not repeat the same mistakes again. It supports practitioners in demonstrating ongoing learning and meeting professional standards.

- Reflection helps to connect concepts learnt through theory and embed them into our day-to-day practice. It allows us to build confidence to achieve our goals, hence increases our motivation to learn.

- Reflective learning helps you as a learner to take charge of your own learning through sharing both your strengths and weaknesses, identifying skills you have accomplished and skills that still need improving.

Tips

- Make sure you build some time for reflection in your learning plan

- Make use of a reflection tool such as learning journal, diaries, blogs, reflective sheets, audio recordings, video recordings etc.

- Make use of a reflection model and stick to it

- Apply 5 Rs of reflection; Reporting, Responding, Reasoning, Relating and Reconstructing.

Reporting
What happened?
What was the Situation?

Responding
What worked well/ not?
How did it make me feel?
How did I repond?

Relating
Connections to my knowledge and experience

Reasoning
Why did it happen?
Why do I think it happened?

Reconstructing
Conclusion
What could I have done differently?
How will I improve?

Building the Blocks of Learning

We all learn in different ways, but the general process of learning still includes similar building blocks; engagement, assembling, consolidating and applying.

- **Engagement** is closely related to our motivation to learn, and motivation is closely related to reward.

  Engagement is a process where one pays attention to someone or something we can learn from. Some of us engage in learning with a motivation to get a good job the reward of good salary but some of us my simply engage in learning with to learn a new skill and reward being feeling good and positive when showcasing our skill to family and friends

- **Assembling** is about how we all put the information together, some of us may simply learn through instructions from teachers (one-way communication), while others prefer to learn based on our prior knowledge and this requires engagement with teachers or peers (two-way communication).

Building or assembling depends on the quality of instructions one receives and how we differentiate between what is relevant and what is not. Our working memory is a limited space, so it is important to take only relevant information but if this working memory is already full of irrelevant information, it causes distraction.

- **Consolidating** is to ensure that none of the learning is lost, it is a process of embedding the learning in your long-term memory through various methods such as **interleaving** ▶, **spaced learning** ▶ and **retrieval** ▶

- **Applying** knowledge by linking theory to practice to linking it to different ways of presenting the information or sharing, helps us to store it in different ways and it is then easier to retrieve and use when needed.
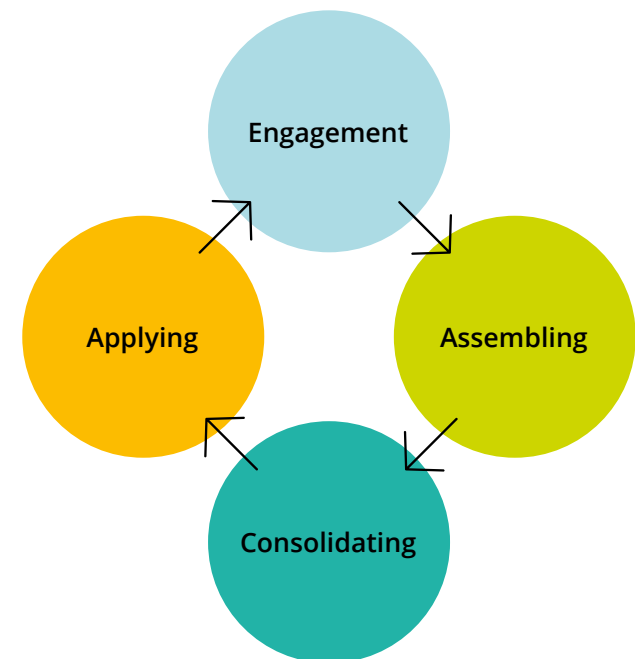
The Science Behind Learning

Learning can be grouped into domains as that is how psychologists have understood our brain works and what is the basis for Bloom's taxonomy.

Cognitive Domain is for Intellectual skills (knowledge)

Intellectual skills required for effective learning include:

- Recall from memory such as recalling random facts, names and dates
- Comprehension: ability to understand the meaning, interpret the problem, instruction and put it in your own words
- Application: ability to use what is learnt in any situation without any prompt for example a first aider carrying out first aid in any situation
- Analysis: Simplifying complex concepts by breaking down into smaller chunks and organising in a way they can be understood. Differentiating between facts and opinions for example working out the best way to paint a room
- Synthesis
- Evaluation

Affective Domain is for feelings and emotions (attitude or behaviours)

- All about how we deal with things emotionally including feelings, values, appreciation, enthusiasms, motivations, and attitudes.
- Receiving- Simply listening to others, being aware and paying attention
- Responding- Actively participating and willingness to respond includes motivation
- Valuing-accepting the norm and differences and expressing them positively or negatively
- Organisation- how we compare and relate to different values to create our own unique value system.
- Internalisation of values- how we express our values through our behaviour, personal, social, and emotional characterisation, and adjustment i.e. do we influence, do we discriminate or simply question
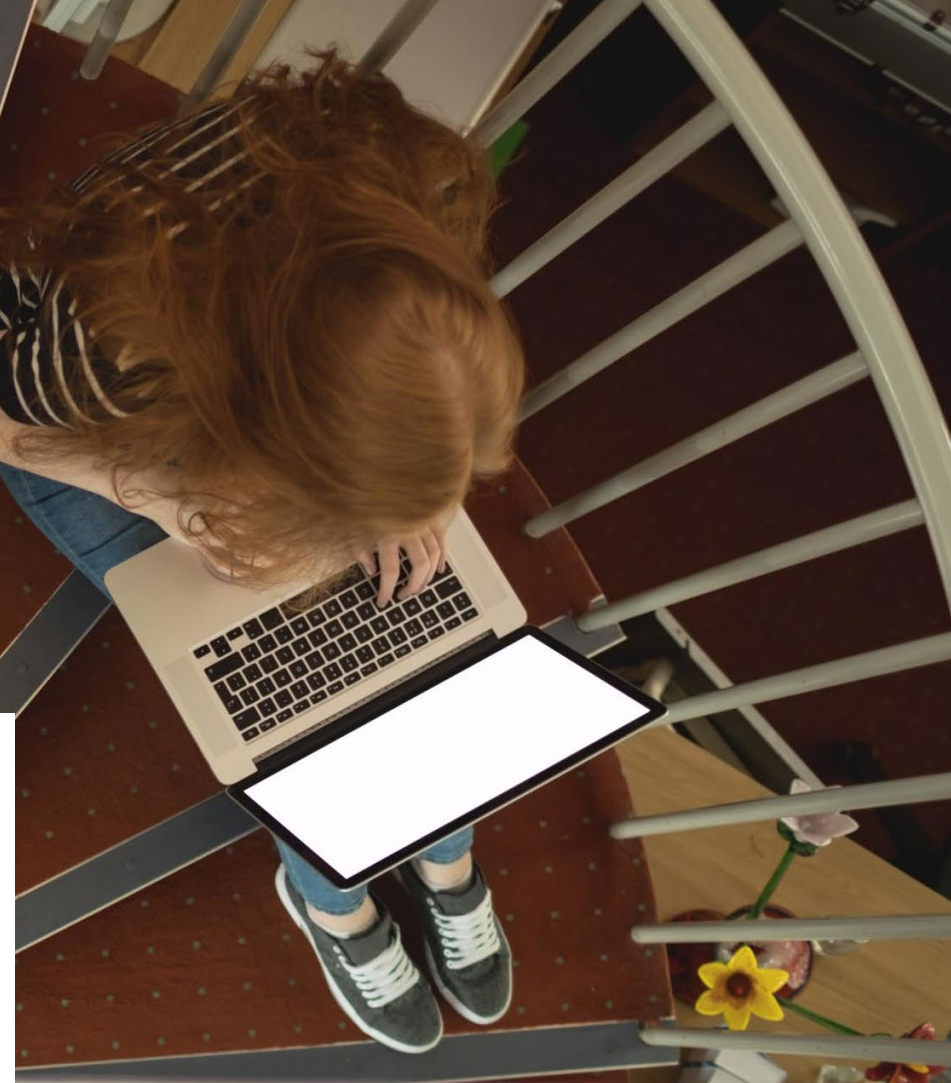
Psychomotor domain is for physical skills (Skills) is for movement, co-ordination, and motor skills.

- Perception- using sensory signals to stimulate and direct motor activity
- Readiness to act or simply using our mind to respond (mindset)
- Guided response or performing after practicing getting the best result
- Mechanism or Habitual Learning that has now become second nature and set as habit e.g making a cup of tea
- Complex responses because of achieving proficiency after years of practice e.g using a computer or parking the car in a tight spot
- Adaptation- our ability to modify what we have learnt to apply in a different situation using a electric cooker instead of gas in a friend's house
- Initiation- creating new patterns to solve new problems, being creative based on already developed skills

Contact Us

To find out more on how we can help you support your learners digital learning and development, get in touch with our Pearson Account Managers for further information and/or to discuss your needs.

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