



Year 9 Metacognition

Mr Lucas- Teacher of Physical Education and
Maths



Everyone valued • **Every day** an opportunity • **Every moment** focused on success

Aims of the session

- To introduce you to what '**Metacognition**' is.
- To look at strategies to support students to develop Metacognitive skills.

Why?

- Action Research
- Y9 & 10 focus group

What is Metacognition?

Metacognition and self-regulation approaches “aim to help learners think about their own learning more explicitly. This is usually done by teaching pupils specific strategies to set goals, monitor and evaluate their own academic development...the intention is often to give pupils a repertoire of strategies to choose from during learning activities”.

What is Metacognition?

Essentially, metacognition means being aware of what you are thinking about and choosing effective strategies.

Often, metacognitive strategies can be divided into 3 stages: **planning**, **monitoring** and **reviewing**.

When the science jargon is stripped away, you're left with developing strategies that help someone become more aware of (thus improving) their thought process.

8 Ways to Develop Metacognitive Skills

by @inner_drive | www.innerdrive.co.uk



Know You Don't Know it All

Knowing the gaps in your knowledge is key



Set Yourself Great Goals

Goals should be both challenging and realistic



Prepare Properly

5 minutes spent preparing is an hour saved later on



React Better to the Feedback You Get

Feedback that is sought but not actioned is a wasted opportunity



Monitor Your Performance

Don't wait until the end to see how you are doing



Seek Out Feedback

This improves your knowledge base, helping you make better choices



Keep a Diary

This will improve self-awareness



Ask Yourself Good Questions

'Is this similar to previous tasks?', 'what should I do first?' and 'what would I do differently next time?'

Know you don't know it all

Some people aren't very aware of gaps in their knowledge, which often leads to over-confidence (Dunning-Kruger effect).

If you think you already know everything, it is unlikely that you will be motivated to seek out ways to improve.



Dunning-Kruger Investigation

- Majority of people tend to overestimate their ability.
- The level of overestimation decreases the more able the participant is.
- The only group that tend to underestimate are the most able.
- Improving a person's metacognitive skills was found to improve accuracy of self assessments.

Set yourself great goals

Goals should be both challenging and realistic. Other tips for effective goals include:

- setting short and long term ones
- focusing more on skill development
- considering potential obstacles

If you know what obstacles may come your way, you will be better equipped to overcome them when the time comes.

11 Ways to Improve Your Goal Setting

by @inner_drive | www.innerdrive.co.uk



Have a Long Term Goal

Gives your motivation a boost.



Have a Short Term Goal

Helps you maintain focus.



Make it Challenging but Realistic

Aim high so that you really push yourself.



What's the Why?

Give a reason why your goal is important.



Make it Specific

Specific not vague terms make it easier to monitor progress.



Focus on Skills

Focus on developing your skills, not just on the end outcome.



Be Flexible

If the situation changes, tweak your goals.



Share Your Goals

If other people know about them, they may be able to help you.



Ensure There is Trust

People work harder on achieving a goal if they trust the person who has set them that goal.



Consider Potential Obstacles

This allows you to come up with a plan, ensuring that you are fully prepared.



Monitor Progress

This helps you stay on the right track and to adjust as needed.



Prepare properly

Prepare Properly – There is a story about a woodman that captures the essence and importance of preparation perfectly:

A woodsman was once asked, **“What would you do if you had just five minutes to chop down a tree?”** He answered, **“I would spend the first two and a half minutes sharpening my axe.”**

As Alexander Pope wrote in his 1711 poem, *An Essay of Criticism*, ‘fools rush in where angels fear to tread’ - a few minutes spent in preparation can lead to hours saved later on.

Prepare properly

- Having the correct equipment
- Pre-learning (Try to go into tasks/lessons with already gained knowledge). Could seek assistance.
- Go into lessons with a mindset to learn - good diet/ hydrated/ adequate sleep/ physically fit
- Revision
- Plan assessments/ essays before writing them.

Monitor your performance

Don't wait until the end to see how you are doing. This is a common mistake that many novices do whilst trying to complete a task. Being able to monitor your performance as you go along and 'checking in' on how you are doing is an important metacognitive skill.

- Reflect on your understanding.
- Compare to past performance.
- Compare against Success Criteria.
- Seek assistance when needed.
- Pause to review what you have done so far.

Seek Out Feedback and Then Use It

Many people make a number of mistakes when asking for feedback. This includes leaving it to the last minute, only asking 'is this ok?' (instead of 'how can I improve this?') and asking multiple questions at once.

Once you have the feedback, you have to use it. Feedback that has been sought but not actioned is a wasted opportunity.

6 Common Mistakes When Asking for Feedback

by @inner_drive
www.innerdrive.co.uk



- 1. Only asking "is this OK?"**
- 2. Not being fully present**
- 3. Leaving it to the last moment**
- 4. Asking "either/or" questions**
- 5. Asking multiple questions at once**
- 6. Using superlatives - like "always", "never"**

Keeping a Diary/ Learning Journal

By keeping a diary of what you did, what you were thinking and how you felt, students will begin to build their self-awareness and develop their metacognitive skills.

This may not come easy to some at first, but after a while, quickly becomes habit.

Ask yourself good questions

By asking yourself psychologically smart questions, you are forced to think deeply about both the task at hand and the best ways to proceed.

Some examples of these questions include:

‘is this similar to previous tasks?’

‘what should I do first?’

‘what would I do differently next time?’.



9 Questions to Improve Metacognition

by @Inner_Drive
www.innerdrive.co.uk

Before

- ▶ Is this similar to a previous task?
- ▶ What do I want to achieve?
- ▶ What should I do first?

During

- ▶ Am I on the right track?
- ▶ What can I do differently?
- ▶ Who can I ask for help?

After

- ▶ What worked well?
- ▶ What could I have done better?
- ▶ Can I apply this to other situations?

What now?

- Leading staff training to encourage implementation of metacognitive strategies in lessons across the school.
- Continue to work with focus group and monitor impact.
- Reflect at the end of the year and think about whole school implementation.

Questions can be asked via the Google Form link within the Year group area for Parents Information Evening