



High Performance Learning

A guide for CCS staff



At Caroline Chisholm School our approach to teaching and learning uses the High Performance Learning framework developed by Professor Deborah Eyre.

High performance learning is an advanced pedagogy that helps our school become world class through systematically developing superior cognitive performance in all our students. Its teaching and learning approach enables students to enhance and build their own ability and to use it productively to obtain good academic results and life-skills

Based on research across cognitive psychology, gifted education and neuro-science, and on 30 years of practical experience of educators in over 16 countries the philosophy of High Performance Learning starts from the following key principles:

- High academic performance is an attainable target for everyone
- We can systematically teach students how to be 'intelligent' and how to succeed in school
- World class schools produce students that are both intellectually and socially confident, who are college-ready, workplace-ready and life-ready with a global outlook and a concern for others
- There are 20 generic characteristics which students need to develop if they are to be high performers in cognitive domains (ACPs) and 10 values, attitudes and attributes (VAAs) that develop the wider learner dispositions needed for cognitive and lifetime success

Learners and pedagogy are at the heart of the framework. The ACPs and VAAs provide a clear structure for student development within our school's vision, context and curriculum. The seven supportive pillars help us to create a climate for success. The High Performance Learning approach reinforces the professionalism of teachers in the classroom through optimising learning opportunities, supporting individual students and fostering personal motivation.

Our aim at Caroline Chisholm School is to achieve the High Performance Learning Award by July 2021.

World Class School:

Everyone in the school, regardless of background or starting point, achieving the highest academic standards

Students equipped with the values, attitudes and attributes that will serve them well in university, the workplace and their lives.

The school delivering this outcome year on year, regardless of changes to context or circumstances

High Performance Learning the basics...

- High performance is an attainable target for everyone.
- We can systematically teach students how to be 'intelligent' and how to succeed in school and life.
- We need to develop, methodically, the cognitive competencies associated with cognitive success and make them the DNA of our teaching.
- There are 30 generic competencies students need to develop and these can be grouped into 8 sets. The more competent students are in each of these the better they will do.
- Although these are generic competencies they are best developed through subjects.
- This is a teacher agenda. It happens in the classroom in the hands of a skilled teacher. It is not a one-size-fits-all 'programme' to be followed.
- Hence schools need to foster a professional community of practice among their educators — no quick-fix, governance model, instructional technique or technology can substitute for this.



High
Performance
Learning

The 7 pillars of high performance

Global Citizens
Advanced Performers
Enterprising Learners

Mindset shift

Enquiry based learning

Expertise development

Practice and Training

Feedback

Engagement of Parents

With students not to them

Values, Attitudes and Attributes • Advanced Cognitive Performance Characteristics

7 Pillars of High Performance

Mindset shift describes the move away from thinking of children as having finite levels of ability defined by their genetic profile and towards seeing the brain as capable of growth and hence all children as having the potential to excel.

Enquiry learning is a learner-centred approach that emphasises higher-order thinking skills. It may take several forms, including analysis, problem solving, discovery and creative activities, both in the classroom and the community. Most importantly, in enquiry learning students are responsible for processing the data they are working with in order to reach their own conclusions (UNESCO).

Expertise development can be defined in layman's terms as not just covering the curriculum but developing the habits and behaviours associated with expertise in a given domain. For example, thinking and approaching tasks like a mathematician or a historian rather than doing the maths or history course. This of course has significant implications for how lessons are taught. Research has given us a good understanding of how individuals develop expertise. In the acquisition of expertise, extended deliberate practice (e.g. high concentration practice beyond one's comfort zone) has been found to have a significant role. Experts become expert because they are prepared to put in the necessary work and to persevere when they meet obstacles in their subject; they are motivated to do that because they have developed a sense of the subject and that leads to a love of the subject. So exploring the nature and conventions of a subject is key to developing expertise within it.

Feedback. Formative, timely and appropriate feedback has been identified as the single most influential factor in helping individuals to progress. It should involve an understanding of the desired goal, evidence about their present position in relation to that goal and guidance on the way to close the gap between the two. To be effective, feedback needs to be clear, purposeful, meaningful and compatible with students' prior knowledge, and to provide logical connections (Hattie, 2009).

Practice and training. This relates to the need to build persistence and resilience in individuals through the use of deliberate practice and training. Cognitive success does not occur by chance, it is achieved via progression through a series of developmental processes, and training needs to enable this opportunity. For many, success will not be immediate. It takes 10,000 hours to make an expert (Levitin, 2006).

Parental Engagement in their child's learning has been found to have a profound effect on progress rates. A 10% dividend when a parent is generally interested and up to 15% when the parent shows strong interest. Parental involvement in a child's schooling for a child between the ages of 7 and 16 is a more powerful force than family background, size of family or level of parental education. Parental involvement has a significant effect on pupil achievement throughout the years of schooling. Educational failure is increased by lack of parental interest in schooling. In particular, a father's interest in a child's schooling is strongly linked to educational outcomes for the child. Many parents want to be involved in their children's education. In a recent study in England 72% of parents said that they wanted more involvement.

Students taking control of their own learning journey. Success is more likely if the child is motivated to learn. Motivation is increased when the child has developed the skills to be an autonomous learner – able to practice, train and learn without the teacher.

Mindset Shift: Are you ready to change gear?



Many of the changes we make to education create a minor adjustment to the system, but findings about how people reach success should completely move the goal posts. Evidence overwhelmingly shows that experts are not born that way, but can be made.

This has been scientifically studied in a wide variety of domains: surgery, acting, chess, writing, computer programming, ballet, music, aviation, firefighting, and many others.

Changing gear

So, if we can *make* experts then that has to be the job of education. In doing so, we must relinquish the practices of the 20th Century where schools assumed that individual students had a set amount of ability and that their educational performance would be determined – at best – by their individual potential, or indeed their home background.

High Performance Learning assumes that almost all students can achieve highly and it is the job of the school to get better and better at achieving that outcome for their students. Teachers need to create intelligence not measure it.

Don't blame it on the genes?

If you don't believe this could be a reality, take a look at the evidence.

Professor Robert Plomin, the world's leading geneticist, said in 2014 of his search for genes that explain differences in our psychology: 'I have been looking for these genes for fifteen years. I don't have any'.

Oliver James (2016) thinks there are childhood causes of our individuality, revealing why our upbringing, not our genes, plays such an important role in our wellbeing and success. He also finds no link has been found between intelligence and social and workplace success. "Once we swot up on understanding people and our ability to ingratiate ourselves with them, anyone can flourish in this arena".

Consistently and overwhelmingly,
the evidence shows that experts
are always made, not born

Anders Ericsson 2007

Our brain is more plastic than we think .

Dr Susanne Jaeggi, 2008

Dr Susanne Jaeggi (2008), when talking about improving working memory, says that when it comes to improving intelligence, many researchers concluded that it was not possible. "Our findings, however, clearly show that this is not the case. Our brain is more plastic than we think."

From all directions the evidence is growing that suggest our genes do not dictate our educational performance.

Fixed and flexible mindset

One popular way to describe this way of thinking was coined by Carol Dweck (2012). She says that in a fixed mindset, people believe their basic qualities, like their intelligence or talent, are simply fixed traits. They spend their time documenting their intelligence or talent instead of developing them. They also believe that talent alone creates success—without effort. They're wrong.

In a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work—brains and talent are just the starting point. This view creates a love of learning and a resilience that are essential for great accomplishment. Virtually all great people have had these qualities.

But remember....

When you change your mindset, adjust your expectations and come to believe that everyone can be a high performer in school, it doesn't happen by chance. It takes three things:

1. The right educational opportunities
2. Support, help and encouragement
3. Commitment and effort from the student

The student working hard, being resilient etc. is good, but alone this will not lead to high performance. They need good teaching and good support.

What does a Mindset shift mean for you?

- Natural ability is no excuse for poor performance of students.
- You should expect that almost all students will perform highly and plan for that outcome.

- Your students – even those who are not doing well now – should know and feel that they can succeed if they commit to working hard, as you will provide the right opportunities and support.
- Feedback to students should be around how well they are performing on the task right now and what they need to do to improve, not whether they are more or less able.
- If students are not doing well on the task they need more help and/or more time to master it rather than being given less demanding work.
- You need to consider whether all students are being given an equal chance to succeed. Review your setting and grouping arrangements.
- Even students with specific learning needs or starting from a low starting point can become expert. It just takes more time. Do not write them off!
- Not all students will become expert by the time they leave your school but they should believe that they leave your school with the capacity to get there eventually.
- You need to take responsibility for the performance of your students.
- You need to harass their family to help out where they can.
- The best way to predict success is to create it, and the more people helping the better!

Enquiry Based Learning: Acquiring new learning by solving problems

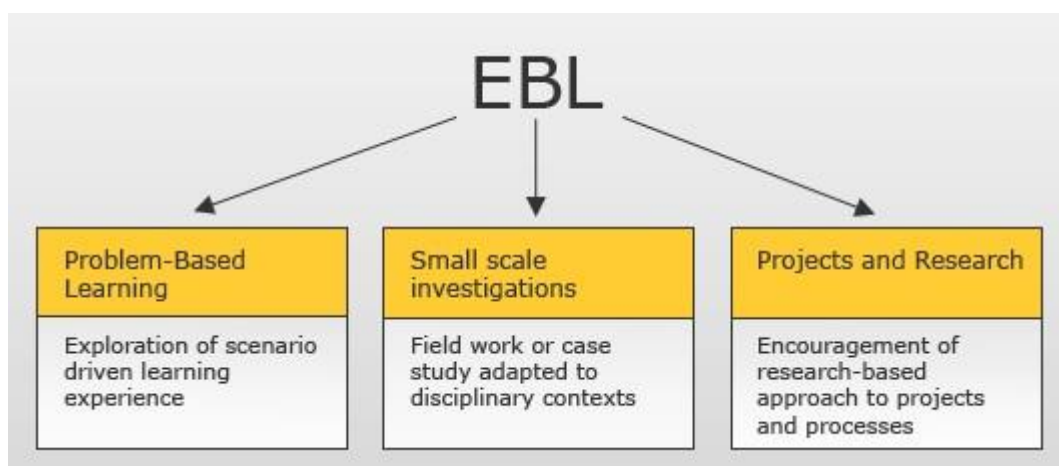


When it comes to academic performance this is not just the result of 'what' is taught but also 'how' it is taught. Not just 'knowledge' but also 'pedagogy'. Learning is often more engaging and interesting if you have a clear purpose and you are actively participating. Enquiry based learning ensures that this occurs. It is not new. It is based on the work of **constructionist** pedagogy advocates such as Bruner, Dewey and Vygotsky and developed almost 50 years ago.

Enquiry based learning is an umbrella term. It covers the full gambit from simply starting lessons or new topics with a question and framing all subsequent work as a possible exploration or answer to that question, through to individual projects which the student designs themselves and uses their own methods to explore.

It is not necessary to use enquiry based approaches as the single pedagogy in developing cognitive high performance, but deploying it regularly really helps. Enquiry based learning is fundamental for the development of higher order thinking skills. It gives students an opportunity to practice many ACPs as well as developing VAAs.

3 types of Enquiry Based Learning



Centre for Excellence in Enquiry Based Learning, University of Manchester

Specific learning processes that people engage in during enquiry based learning include:

- Creating questions of their own
- Obtaining supporting evidence to answer the question(s)
- Explaining the evidence collected
- Connecting the explanation to the knowledge obtained from the investigative process
- Creating an argument and justification for the explanation

An example of Enquiry Based Learning: The Spinning World (UNESCO)

Q1 Describe the way in which the Earth is moving.

Q2 Is this an accurate way of showing how the Earth spins on its axis to produce day and night? Why?

Q3 What evidence is your answer based upon? What previous knowledge helped you answer this question?

The following questions may help you check your answers to Questions 1-3:

- Which way is the Earth spinning – clockwise or anticlockwise? Imagine the sun shining on to the world. If you wish, point a torch at the screen and switch it on so that the torch light is like the sun's rays.
- In which direction does the sun rise in the area where you live? Where does it set?
- In which direction does the sun rise on the globe rotating on the screen?
- On the screen, does the sun rise first over the eastern or western side of continents?
- Which side of the continents see dawn first?
- How could the spinning Earth on screen be made accurate?

Enquiry Based Learning encourages reflection

- Reflect on what you were thinking as you tried to solve the problem.
- What did you do first as you tried to solve the problem?
- What type of clue most helped you solve the problem?
- Would more information or additional guiding questions have helped?

Remember:

If you are introducing more enquiry based approaches into your teaching repertoire it's important to help your students develop the necessary skills.

There are loads of materials on the web about enquiry based learning that can support you.

What does Enquiry Based Learning mean for you?

- The use of enquiry based learning opportunities will help your students to develop competency in the ACPs and VAAs.
- You can and should use enquiry based learning in your classroom
- Enquiry based learning can be used with any age group or in any subject
- You can take your existing syllabus or curriculum and see how you can make some topics or lessons more enquiry focused
- You can experiment with just one or two lessons to gain confidence
- Enquiry based learning should not be the only approach used – sometimes it is better to convey information directly
- You need to help your students develop the skills that are needed to conduct research or investigate problems, e.g., how to pose good questions, how to plan an investigation, how to gather data and reflect on its significance.

Expertise Development



Expertise Development is based on the idea that the best way to become competent in a subject is to look at how the experts in that subject work and try to replicate it. This may include:

- The features, skills and conventions that are valued in the subject
- How they are acquired
- The habits of subject experts in that subject

This focus on the development of expertise enables the student to perform well not only in school but beyond, in university and later life. In simple terms it is about thinking and approaching tasks like a mathematician or a historian rather than 'doing' the maths or history course. It helps the learner 'construct their own learning' and make sense of it.

Expertise definitions often include some personal and social characteristics, so this not just about being a 'brain-on-legs'; it is about being an effective operator. Because of this, schooling on this model is a broader educational experience rather than an academic 'test passing' factory. It foregrounds thinking, not just remembering, and interpretation of knowledge and concepts, not just absorbing them.

"Mathematics in Singapore is not about knowing everything. It's about thinking like a mathematician".

Andreas Schleicher, head of the OECD's education assessment programme

Different subject domains value different skills and conventions

What are the main skills and conventions in your subject area? Can you list a top 5?

Mature mathematicians

- grasp the structure of a problem
- generalise
- develop chains of reasoning
- use symbols and language accurately and effectively
- think flexibly - backwards and forwards and switching strategies
- leave out steps and thinking in abbreviated mathematical forms

- remember generalised relationships, problem types, ways of approaching problems and patterns of reasoning
- persevere in problem solving (Krutetskii, 1976)

Young mathematicians

- have a liking for numbers and use them in stories and rhymes
- have an ability to argue, question and reason using logical connectives (because..)
- like pattern-making, revealing balance or symmetry
- set out their toys with precision
- use sophisticated criteria for sorting
- take pleasure in jigsaws and other constructional toys (Straker 1983)

Mathematicians (example from nrich www.nrich.maths.org)

As the above example shows, the features, skills and conventions may look different in the early stages but they are actually the building-blocks which lead to the more mature version.

As a teacher you can:

1. Actively create tasks designed to introduce students to key subject skills and conventions
2. When they crop up in class naturally, talk to students about them and why they are useful
3. Reward your students when they exhibit these behaviours and especially when they do it often enough to have created the 'habit'.

The role of Mastery in Expertise Development

Mastery Learning (Bloom, 1968) is a way of teaching in which students 'master' one topic before moving on to the next subsequent topic. Students must demonstrate competence in one area before proceeding to the next

Mastery learning is based on 3 assumptions:

1. Almost every student can master every topic
2. Some students need more time than others
3. Some students need more help than others

Therefore most students can learn if given sufficient time and help to do so.

It is a useful way of helping students to systematically acquire the features, skills and conventions that are valued in the subject and the habits of subject experts.

Is Mastery Learning good for all subject domains?

Mastery Learning works best for subjects where the subject matter is hierarchical in nature – that is, when certain concepts and skills provide a foundation for future learning. For example, maths. Mastery learning is not appropriate for long-term goals such as critical thinking, scientific reason, and creative writing. Hence it should be used as one part of the approach to expertise development rather than all of it.

The role of Enquiry Based Learning and problem solving in Expertise Development

Enquiry based, problem solving scenarios provide learning opportunities for developing the features, skills and conventions in many arts and some science domains. At its best enquiry based learning enables students to reach a point where they are not simply investigating questions posed by others, but can formulate their own research topics and convert that research into useful knowledge. This is particularly relevant to some subject domains.

Using enquiry based approaches, students gain not only a deeper understanding of the subject-matter, but also the knowledge development and leadership skills required for tackling complex problems that occur in the real world.

The role of lectures and talks in Expertise Development

This kind of teaching can also be useful in some contexts. Developing Expertise is about finding the best vehicles to build the subject features, skills and conventions that are valued in the subject.

Which approaches work best in your subject?

Can you think of an occasion when a different approach might be useful?

Practice and Training: Are you ready to commit to becoming an expert?



Research into the history of education combined with more recent scientific experiments have uncovered a number of conditions for optimal learning and improvement. K. Anders Ericsson suggests that **Deliberate Practice** is one of them. There are four essential components to deliberate practice. When these conditions are met, practice improves accuracy and speed of performance on cognitive, perceptual and motor tasks.

Four Essential Components of Deliberate Practice:

1. You must be motivated to attend to the task and exert effort to improve your performance.
2. The design of the task should take into account your pre-existing knowledge so that the task can be correctly understood after a brief period of instruction.
3. You should receive immediate informative feedback and knowledge of the results of your performance.
4. You should repeatedly perform the same or similar tasks.

Remember:

Without adequate feedback on your performance during practice, efficient learning is impossible and improvement is minimal.

Simple practice isn't enough to rapidly gain skills.

Mere repetition of an activity won't lead to improved performance.

Your practice must be:

- intentional
- aimed at improving performance
- designed for your current skill level
- combined with immediate feedback and repetitions.

What does Deliberate Practice mean for you?

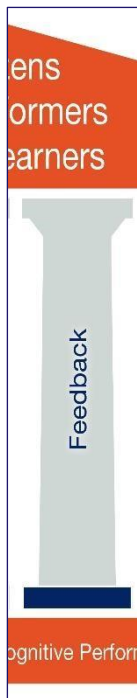
- Natural ability is no excuse.
- You can no-longer blame it on the genes and suggest you are just not good at something.
- How you practice matters most.

- To benefit from practice and reach your potential, you have to constantly challenge yourself. This doesn't mean repeatedly doing what you already know how to do. This means understanding your weaknesses and inventing specific tasks in your practice to address those deficiencies.
- How long you persevere determines your limits.
- Becoming an expert is a marathon, not a sprint. You cannot reach your mental and physical limits in just a few weeks or months. To grow to the top of your game, you'll have to persevere for years.
- Motivation becomes the real constraint on expertise.
- Practice isn't always fun. It's an investment in improving yourself, your skills and your future.

Adapted from Corbett Barr, Fizzle Co.

Feedback:

How to make sure the feedback you give your students moves them forward



Effective feedback has been shown to be the single most effective form of classroom intervention (Hattie, 2009) and it is certainly a key component in developing high performance. Conversely, ineffective feedback can be damaging and halt progress. Feedback needs care.

If a student is to construct their own learning journey they always need to know where they are and what they need to do next to improve.

Five essential components of effective feedback:

1. Specific and based on actual evidence related to the last task
2. Focused on both progress made and clear actionable next steps
3. Prioritises just 1-2 most important areas for improvement
4. Happens immediately or as soon as possible after the event
5. Takes into account the resilience of the person and their feelings

Remember:

Without adequate feedback on your performance during practice, efficient learning is impossible and improvement is minimal.

Are your students ready for feedback?

You need to get your students to understand that feedback is a helpful part of learning rather than a criticism of them. It is about their **performance on the task** and how to take the next step to even better performance - not about them as being 'good' or 'bad' at a subject. It is objective.

"Real experts seek out constructive, even painful feedback. They're also skilled at understanding when and if a coach's advice doesn't work for them."

Ericsson, Prietula, Cokely. Harvard Business Review July -August 2007

Things to think about when giving feedback

- Timing
- Amount

- Mode
- Focus
- Progress from last feedback
- Comparison of present performance with optimal performance
- Next steps

“If there’s a single principle teachers need to digest about classroom feedback, it’s this: The only thing that matters is what students do with it. No matter how well the feedback is designed, if students do not use the feedback to move their own learning forward, it’s a waste of time. We can debate about whether feedback should be descriptive or evaluative, but it is absolutely essential that feedback is productive.”

Dylan Williams

How do you know if your feedback is effective?

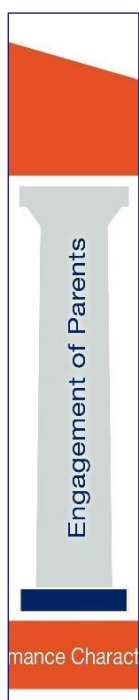
- Your students do learn—their work does improve.
- Your students become more motivated—they believe they can learn, they want to learn, and they take more control over their own learning.
- Your classroom becomes a place where feedback, including constructive criticism, is valued and viewed as productive.

What does feedback mean for you?

- Good feedback increases both performance and motivation in your classroom.
- Feedback should be a regular part of daily practice in your classroom.
- You should explain its role to your students and set a culture where feedback is valued and requested.
- Make sure that you understand how to give effective feedback.
- Be consistent in the nature and frequency of your feedback.
- Feedback should focus on both strengths and weaknesses and define clear next steps.
- Feedback should cause the student to be reflective and rate their own performance.
- Feedback isn’t always fun. It’s an investment into improving yourself, your skills and your future.

Engaging Parents:

Why involving parents in the journey to high performance is important



High Performance Learning focuses on helping to create the optimal conditions for individuals to reach success. We are all aware that whilst schooling is the important formal context for learning, parents, carers and families are by far the most important influences in a child's life. Their support can therefore play a vital role at all stages of education.

Research shows conclusively that children who have support from their family are likely to achieve more highly and behave better. So if we want to help more students become high performers we need to maximise the role of parents in the learning process. They can help to promote learning and create a context in which children and young people can engage positively with teachers and with their peers.

It is also the case that teachers benefit from developing positive partnerships with parents by involving them in all decisions affecting their children's education and learning. By doing this students feel that the school and the home are working together to support them

Involvement or engagement

Most schools **involve** parents in the school in various ways such as reporting to them regarding their child's progress or in fundraising and supporting the school. This is all useful and positive. But to increase the chances of students performing highly we need to emulate the best schools and actively **engage** with the family and work in partnership to support the child in their learning. This means not only helping parents to understand how best to support their child in their learning but also listening to the parents as they have a deeper knowledge of their child's personality, strengths and weaknesses. You should expect to listen to the family and learn from them as well as ask of them

"Engaging with parents gives them the chance to understand the role that they play in their children's learning and development and fosters parental involvement."

Education Scotland

.One strength of the High Performance Learning approach is that it makes the learning process explicit. The school can share with parents or carers the ACPs and the VAAs and explain why they are the competencies needed for success. Parents, families and carers

can then also play their role in fostering these competencies during day-to-day family life. It is not a question of parents creating an onerous training regime (Tiger Mums) but rather them being aware that these competencies are valuable and that reinforcing them helps.

“Can you please tell me about the times in your child's life that he/she has seemed to be learning the most and working hard in school, and what you think their teacher was doing at that time to encourage it?”

Larry Ferlazzo

When a school is systemically building the ACPs and VAAs parents and carers can help by:

1. Reinforcing the competencies being developed in school by creating opportunities for children to practice at home. For example, they can encourage and reward practice or resilience and also encourage ACPs like connection finding or finding solutions to problems.
2. Having an appreciation of their own child's strengths and weaknesses and helping them to build on their strengths but also mitigate or overcome - rather than ignore - their weaknesses.

Dealing with different types of parents

Parents from different cultural or societal backgrounds often have different aspirations for their child and different expectations of their role in relation to their learning. So different approaches will be needed. On the surface it may appear that some are less supportive than others but that is not necessarily a matter of neglect. If we are working in partnership we need to be open-minded and appreciate the different perspectives of others.

Annette Lareau (2011), in her qualitative longitudinal work on race, class and family life in the USA, points to a middle-class parenting style which she calls '**concerted cultivation**'. They left nothing to chance. They encouraged their children to talk back to them and negotiate, so building a personal confidence and style. They fought for their child if they did not make the top set and challenged the school. They scheduled worthy activities and opportunities for their children to acquire new skills. By contrast, parents she found in disadvantaged circumstances adopted a less interventionist approach, seeing their responsibility as needing to care for their children but letting them grow and develop on their own. This may be reflected in your school or it may not.

Lareau's findings relate to socio-economic background, but culturally parents also have a sense of their role and it may be completely in tune with that of the school or substantially different. If the culture of the school is very different from the education the parents experienced themselves – for example in a different country with a different educational tradition - then it is all the more important to be explicit about expectations. Finally, not everyone remembers their own schooling with affection. Schools are often seen as intimidating places. If you want parents to play a role in their child's learning they need to feel that the school is approachable and friendly. With so many different factors it is important to think through your approach!

Remember:

Without the involvement of parents, carers and families it is more difficult for a child to perform highly. If parents and families cannot help, can you find someone else to play the role of supporting adult?

Six Essential Components in involving parents in their child's learning:

1. Make them feel valued and welcome in the school
2. Explain what you are trying to achieve and their role in it
3. Give them practical ideas for supporting their child's learning
4. Listen to what they have to say to you
5. Appreciate individual contexts and circumstances
6. Don't patronise or use jargon

Top tips for parents

- Expect your child to have the ability to achieve highly and show them that you have confidence in them
- Praise your child for their efforts because this encourages a 'growth' mindset. So
- 'well done for having a go or sticking at that' or 'you are so much better at that than you used to be' or 'do you remember when you could only...', etc.
- Encourage curiosity
- Help your child develop empathy
- Talk and read with your child and help them connect up ideas
- Give them responsibility and don't worry if they make mistakes
- Establish a regular time to talk – on the way to school, at mealtimes, etc.
- Show that you like learning as well

What does parental engagement mean for you?

- Parents and carers are your allies – make good use of them.
- Do not expect parents to know how to support learning – teach them.
- Recognise that parents may see their role differently. One size does not fit all.
- Have realistic expectations of parents. They are busy. Make what you ask of them specific and manageable.
- Make it personal. A quick chat to an individual can work better than a meeting.
- Do not penalise children whose parents cannot be involved.

With Students not to them?



Key points:

- Each individual learning journey to high performance **belongs to the learner** and they need to play an active part in steering it to success. • To achieve high performance the learner needs to **want** to achieve it and they need to be willing to do what it takes to achieve it.
- It is important that the learner believes they **can** achieve it – it's within their capabilities.
- It helps if the learner finds the process largely **engaging and rewarding** as they are less likely to lose motivation.
- Learners must also recognise that it will sometimes be **hard** and that therefore they need to actively **commit before they start** to continuing even when the going gets tough.
- All learners need regular **encouragement and support** along the way, and help to chart their progress on their journey to success.

Setting the culture for High Performance Learning in school

If the school is to be successful in creating a High Performance Learning culture then careful thought needs to be given to how to establish this contract between school and learner. It must be both overt but also becomes the 'DNA' of the school – so much a part of it that it is difficult to identify all the mechanisms they make it so. At the start it is helpful to think about the following:

	What we need to do	How do we make that happen?
1.	Schooling must be an active partnership between the teacher and the learner with each fully aware of the part they and the other will play.	When do we explain this to students? Do we remind them annually for example? Do we reward examples of where students have taken a lead?

2.	The school will provide the opportunities and support that will enable the student to excel and they will provide them in a range of formal and informal contexts. Core curriculum and enrichment – formal pastoral support and informal help.	When do we explain to students the role of core plus enrichment and why it's important for them to play an active role in all parts of the school? Do we have enough opportunities for students to take control of activities as this helps them take control of their learning?
3.	For the school to play its part it needs the active participation of the student. Hence it must establish structures and routines which routinely and actively invites students to articulate where they are in their learning.	Where are our examples of times when students reflect on their learning and explain where they are to others? Who leads the overall teaching and learning approach in our school? Does it that group have student involvement?

Remember:

If we want students to participate fully they always need to understand:

- the purpose
- the methods
- the assessment
- their role

What are we trying to achieve with you in school?

Students should master important conceptual systems in various content fields.

Students should develop skills and strategies that enable them to become independent, creative, self-sufficient searchers after knowledge.

Students should develop a joy and excitement about learning that will carry them through the grind and routine that is an inevitable part of learning.

Adapted from Gallagher (1985)

A school that involves students in school life is more likely to involve them in their learning.

Formal student involvement structures such as School Council, charity committees and leadership roles, which aim to foster student leadership capability are a good first step in

helping to develop more autonomous learners. This kind of work leads to very positive benefits.

More generally there is evidence that involving pupils more in school life can have positive impacts for themselves, the school and staff. It can lead to:

- Improvements in attainment
- Pupils more confident in their learning
- Improvements in teaching practice
- Better discipline and behaviour
- Enhanced communication and listening skills for pupils

(Participation Works.org.uk)

What does Student engagement mean for you?

- This is not about what **you do** it's about what **they learn**.
- Not all learning needs to be student led but it does need student involvement.
- Some teaching methodologies such as enquiry-based approaches are helpful in increasing student involvement in their learning but teacher Q and A can also work.
- Some students will like playing a more active role whilst others will be more reluctant and want you to be paternalistic – you need to build this capability in students.
- Increasing the requirements for problem solving is useful.
- Increasing the role of reflection, self and peer assessment etc can increase student understanding of how to monitor learning.
- Consider some formal learn-to-learn activity. Some primary schools have a Learn-to-Learn week.
- Success is students making fast progress and feeling both socially and intellectually confident. They are then set-fair for high performance in due course.
- If you want students to be effective learners it helps if you show that you too are a learner... What did you learn today?



High
Performance
Learning

How do High Performing Learners think?



- Intellectual playfulness
- Flexible thinking
- Fluent thinking
- Originality
- Evolutionary or revolutionary thinking

Creating



- Meta-cognition
- Self-regulation
- Strategy planning
- Intellectual confidence

Meta- thinking



- Connection finding
- Generalisation
- Imagination
- 'Big picture' thinking
- Seeing alternative perspectives
- Abstraction

Linking



- Critical or logical thinking
- Precision
- Complex and multi-step problem solving

Analysing



- Automaticity
- Speed and accuracy

Realising





Advanced Cognitive Performance Characteristics (ACPS)

META-THINKING



Meta-cognition	The ability to knowingly use a wide range of thinking approaches and to transfer knowledge from one circumstance to other.
Self-regulation	The ability to monitor, evaluate and self-correct
Strategy-planning	The ability to approach new learning experiences by actively attempting to connect it to existing knowledge or concepts and hence determine an appropriate way to think about the work
Intellectual confidence	The ability to articulate personal views based on evidence

LINKING



Generalisation	The ability to see how what is happening in this instance could be extrapolated to other similar situations
Connection finding	The ability to use connections from past experiences to seek possible generalisations
Big picture thinking	The ability to work with big ideas and holistic concepts
Abstraction	The ability to move from concrete to abstract very quickly.
Imagination	The ability to represent the problem and its categorisation in relation to more extensive and interconnected prior knowledge
Seeing alternative perspectives	The ability to take on the views of others and deal with complexity and ambiguity

ANALYSING



Critical or logical thinking	The ability to deduct, hypothesise, reason, seek supporting evidence
Precision	The ability to work effectively within the rules of a domain
Complex and multi-step problem solving	The ability to break down a task, decide on a suitable approach, and then act

CREATING



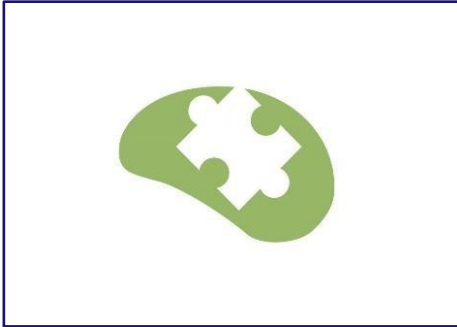
Intellectual playfulness	The ability to recognise rules and bend them to create valid but new forms
Flexible Thinking	The ability to abandon one idea for a superior one or generate multiple solutions
Fluent thinking	The ability to generate ideas
Originality	The ability to conceive something entirely new
Evolutionary and revolutionary thinking	The ability to create new ideas through building on existing ideas or diverting from them

REALISING



Automaticity	The ability to use some skills with such ease as they no longer require active thinking
Speed and accuracy	The ability to work at speed and with accuracy

Advanced Cognitive Performance (ACPs): Thinking-about-thinking



In order to be successful academically you need to acquire a repertoire of ways of thinking that enable you to make sense of information, create new thoughts and know how to approach and unscramble complex ideas.

We have known since the sixties (Bruner, 1967) that academic success comes when individuals construct understanding and meaning by linking single events together to make a pattern or schema. Thinking about

how you think helps you to be a more effective thinker and problem solver.

Essential Components of Meta-thinking:

- You need to know what kinds of thinking would be useful and when to use which.
- You need to learn the basic repertoire of thinking skills.
- Thinking is about being critical/logical and also creative. It is not an 'either/or'.
- You need to monitor yourself and self-correct when it's obvious you need a different approach.
- You will learn that some ways of thinking always work well in certain circumstances – when it is a 'this' do 'this' – this is helpful but remember sometimes the unconventional is even better.
- The more you are aware of your thinking processes the more confident you become as a learner. It helps you be independent.
- The faster and more automatic you make this process the better you will do.

Remember:

Thinking about the possible ways to think about a problem is very helpful when you are faced with a difficult task or new concept. It helps you get started.

Meta-thinking is thinking-about-thinking

Decide what you think is the best way to tackle a problem.

Break complex problems down into manageable chunks so you know where to start.

Think about what you find easy and think back to previous mistakes so that you can avoid them this time.

Be confident in your choice of approach – it's based on previous evidence of success – but be willing to change if the first approach doesn't work.

Failure this time is not ideal but it's ok – it helps you know what to avoid next time. See it as a key part of learning. Don't be afraid of it.

What does Meta-thinking mean for you as a teacher?

- Learning the repertoire needed for advanced thinking can help students become much better, and much more independent, learners.
- We know you can *teach* people how to be advanced thinkers and so you should expect that all students can achieve this.
- It will take some students longer than others to identify thinking strategies and to use them independently but you can accelerate the process by pointing out the thinking approach you are suggesting for specific tasks and why.
- Students will be more confident in selecting their own approaches if you explicitly value 'having a go' as much as 'getting it right'.
- If you are looking for practical materials, lots of examples of suitable tasks can be found in the resource materials designed for gifted or more able students. You should use them with everyone.
- Regularly create tasks designed to develop the specific thinking approaches and use them in your classroom.
- Understand that research tells us that teaching thinking only works if it is done within the context of a subject. Generic thinking skills programmes have limited impact but their materials may be useful for use in your subject teaching.
- There are programmes that you might consider deploying to systematically develop specific thinking techniques e.g. P4C develops Socratic questioning.
- Meta-thinking needs to start early. Do not wait for KS2 or later.
- Even if students have not learnt this kind of thinking in primary they can catch up quickly if you focus on it in secondary.
- Talk to parents about thinking and get them to understand its importance and how to nurture it. You could even run a workshop...
- Help students to appreciate which forms of thinking are used most frequently in your subject.

Make **meta-thinking** a valued habit in your class and in your department and school

Advanced Cognitive Performance (ACPs):

The importance of **Linking**



To be successful academically you need to acquire a repertoire of ways of thinking that enable you to make sense of information, create new thoughts and know how to approach and unscramble complex ideas.

We have known since the sixties (Bruner, 1967) that academic success comes when individuals are able to

construct understanding and meaning by linking single events together to make a pattern or schema. So encouraging this linking is helpful in optimising an individual's chances of success.

Essential Components of Linking:

- You need to know what kinds of thinking would be useful and when to use which.
- You need to actively look for connections with what you already know.
- Thinking about what worked in similar circumstances can help you decide what to do now.
- Don't just make obvious connections, think outside-the-box.
- The faster and more automatic you make this process the better you will do.

Remember:

You are trying to make sense of your learning so that you can learn independently rather than always being reliant on others to teach you

Getting the most out of Linking

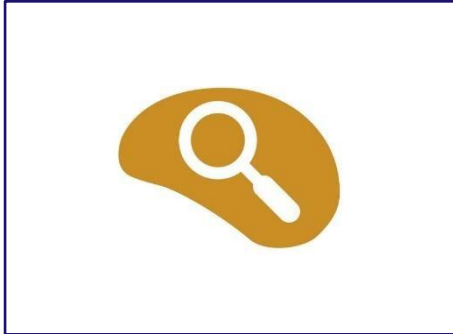
1. Think about whether what works in this circumstance is a general rule. Would it always work?
2. Always be looking for patterns.
3. Consider whether you can create more links if you approximate: 'this is not exactly the same but it's a bit like...'
4. Try starting from a big idea and then seeing how all the small pieces are really connected to this.
5. Sometimes it helps to think in the abstract, in symbols or pictures, not just in words. Try concept maps or other visual techniques or use formulas.
6. Play a game of imagining novel ways to connect seemingly unconnected ideas. It can be great fun!
7. Don't forget to make use of other people, sometimes they see connections you don't see or their connections are at odds with yours. Check them out and decide whose is better.

What does Linking mean for you as a teacher?

- Concentrating on **linking** can help your students become better learners.
- **Linking** is valuable at any age as it becomes more complex as students know more. Get the habit in nursery and then build on it.
- Encourage parents to play the '**linking** game' at home.
- Practice makes perfect so make sure you encourage **linking** in lessons and overtly reward it.
- Encourage students to look for patterns and when they find one talk about it.
- Develop skills in **linking** by starting where there are obvious links and asking students to identify them.
- Then create tasks where students have to find non-obvious links. This helps them be more creative.
- Create tasks where there is more than one right answer so that students learn that different people make different links and sometimes it is not the most obvious which is the most helpful.
- Teach techniques that help students become better at **linking**. Concept lines, brainstorming, concept making, visual representation etc.
- Research shows that presenting knowledge in both concrete and abstract terms is far more powerful than doing either one in isolation.
- Help students to appreciate which forms of **linking** work best in your subject.
- Make **linking** a valued habit in your class and in your department and school.

Advanced Cognitive Performance (ACPs)

Can you **Analyse**?



To be successful academically you need to acquire a repertoire of ways of thinking that enable you to make sense of information, create new thoughts and know how to approach and unscramble complex ideas.

We have known since the sixties (Bruner, 1967) that academic success comes when individuals are able to construct understanding and meaning by linking single events together to make a pattern or schema.

A key skill in advanced learning is the ability to analyse information in order to position it in your learning schema. You need to master your understanding of it before you can manipulate it.

Essential Components of Analysis:

- Reflect on what the information tells you.
- Be logical in how you deal with the information.
- Question ideas and assumptions rather than accepting them at face value.
- Take your time and keep working until you can be confident in what you can actually deduce from the information.

Remember:

You are trying to make sense of your learning so that you can learn independently rather than always being reliant on others to teach you.

Getting the most out of Analysis

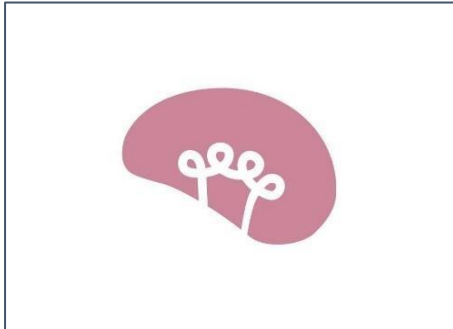
1. Decide what you want to achieve before you start.
2. Think about topics or issues in an objective and critical way.
3. Identify the various different arguments there are in relation to a particular issue.
4. Clarify and seek to understand any points that seem confusing.
5. If possible prioritise some points as being of more significance than others and create a rank order.
6. Evaluate any point of view expressed to determine how strong or valid it is.
7. Recognise any weaknesses or negative points that there are in the evidence or argument.
8. Notice what implications there might be behind a statement or argument.
9. When creating your own argument make sure your reasoning is logical and structured.
10. If the way forward is not immediately obvious, break down the task into smaller pieces.
11. Take your time, don't rush and jump to conclusions!

What does Analysis mean for you as a teacher?

- Students need to be good at both critical and creative thinking if they are to succeed.
- Concentrating on **analysis** can help your students become better learners.
- Skills of **analysis** can be *taught* but in order to get better your students need many opportunities to practise, so you need to create these opportunities in your lessons.
- Comprehension is a building block for more sophisticated **analysis** so it is useful to start with this.
- The earlier you start to develop skills of analysis the better. They are the basis of most formal education so starting in nursery gives children a head-start.
- Don't restrict opportunities to those which are easy. Include complex and multistep problems so that students learn how to break tasks down into manageable chunks.
- It is helpful to get your students to be precise, so overtly reward careful thinking and logical analysis.
- Most subjects require students to think critically and logically so it should be everyone's role to create logical and critical thinkers.
- Creating opportunities for students to deduce, hypothesize etc. does not have to happen only in formal lessons. It can happen everywhere: in enrichment, in sport, in School Council.
- Make **analysis** a valued habit in your class and in your department and school.

Advanced Cognitive Performance (ACPs):

Creative thinking is as important as critical thinking



To be successful academically you need to acquire a repertoire of ways of thinking that enable you to make sense of information, create new thoughts and know how to approach and unscramble complex ideas.

We have known since the sixties (Bruner, 1967) that academic success comes when individuals are able to construct understanding and meaning

by linking single events together to make a pattern or schema. A key skill in advanced learning is the ability to be creative in your thinking.

There is no single definition of what it means to be creative but we all have a general sense of what it means. Creativity is not just about having wacky, 'off the wall' ideas, it is more often about seeing a slightly different possibility from the usual one.

'Creativity involves looking at familiar things with a fresh eye.'

Education Scotland

Essential Components of Creativity:

- Curiosity
- Open mindedness
- Imagination
- Problem solving

Remember...

We are all creative. Some people naturally seek new ideas and others have to discipline themselves to look beyond the obvious, but everyone can do it and from an early age.

Getting the most out of Creativity

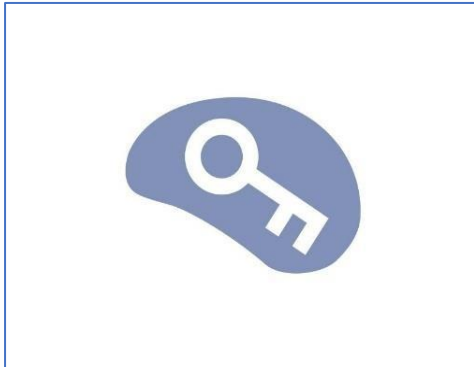
1. Don't just do what you are asked to do. Look for what else you could do with the task or problem.
2. Generate as many solutions as you can to a particular problem before choosing one - first ideas are rarely the best. (Brainstorm)
3. Even if you have a great idea or one you have used before try dropping it and thinking of another.
4. Can you think of a fresh or novel way to do this? Bring your own angle.
5. Don't always aim for a radically different idea, just modify the existing one a little.
6. Once you know the rules try bending them to create something fresh (Intellectual Playfulness).
7. Not all creative ideas are good ones so critique them.
8. Give it time. Creative ideas often occur at random times not when you are in the lesson or immediately after the problem was first set.
9. Being creative is fun. Enjoy it!

What does Creativity mean for you as a teacher?

- Students will only do well academically if they can be creative as well as critical.
- Concentrating on creativity can therefore help your students become better learners
- The idea that some students are creative and some are not is a myth. We are all creative.
- Creativity skills can be *taught* but in order to get better your students need many opportunities to practise, so you need to create opportunities for this practice.
- You need to apply the same rigour to creative thinking as you do to critical thinking. Not all creative ideas are good ones and so students need to learn to critique their ideas.
- Every subject is creative not just the 'creative subjects'. Look for the creativity in yours and make students aware of it.
- Creativity often occurs after you have learnt the initial skill set. Once you know how to do something you can start to bend the rules to create new forms. This is a good way to create greater challenge.
- Problem-solving tasks lend themselves to creative thinking.
- Asking for multiple solutions causes students to generate ideas that are more creative.
- Make use of techniques like brainstorming or concept-mapping to enhance creativity.
- Make **creative thinking** a valued habit in your class and in your department and school.
- Creative thinking should be fun. It's part of what makes learning rewarding.

Advanced Cognitive Performance (ACPs):

Realise your capabilities by working 'smart'



To be successful academically you need to acquire a repertoire of ways of thinking that enable you to make sense of information, create new thoughts and know how to approach and unscramble complex ideas.

But if you want to be truly successful academically you need to learn how to use those thinking skills to optimal advantage

Essential Components for *Realising* your Meta-thinking, Linking, Analysing and Creating:

- Automaticity
- Speed and accuracy

'It takes 10,000 hours to make an expert.'

Daniel Levitin

'It takes a lot of hard and smart work and that is central to success. But you can be working hard and not necessarily be improving. So you need to be clever about what you do.'

Michael Johnson

Remember...

You can make yourself more successful if you work hard but also work 'smart'.

Getting the most out of Realising

1. The more you practise skills the more they become natural and you can deploy them quickly and automatically. This applies to ways of thinking and behaving just as much as practical skills. This is called Automaticity.
2. This 'muscle memory' is one reason why practice makes perfect. The more muscle memory you create the easier and faster you respond and the more automatic certain mental routines become.
3. You can train your mind to remember more. Why not look at some techniques.
4. When it comes to success it helps to be able to think fast and accurately but out of the two accuracy is the most important. So don't rush and be careless.
5. Try to work at a pace that is comfortable for you and allows you to be accurate.
6. If you prefer to work fast then make sure you go back and correct.
7. Always check your work for mistakes.
8. It is fine to make mistakes but you need to learn from mistakes so as not to repeat them.
9. After you have finished a task, reflect on it and think about how you could improve it next time. Were you accurate in your understanding? Were you accurate in your execution?

What does this mean for you as a teacher?

- To optimise critical and creative thinking students need to be able to do as much as possible **automatically** and also be **quick and accurate**.
- Encourage your students to appreciate that **automaticity** can really enhance their learning and their exam outcomes.
- Practise, practise, practise is the way to automaticity.
- Help your students to understand the relationship between speed and accuracy and the importance of both.
- Encourage your students to discover how they work best and how to optimise that way of working.
- Make **Realising** techniques valued habits in your class and in your department and school.
- Anyone can do this. It makes a significant difference to achievement levels so stress its importance.

Progression Levels for the Advanced Cognitive

		Stage 1	Stage 2	
META-THINKING	Meta-cognition	<ul style="list-style-type: none"> are aware of the thinking skills used to solve a problem 	<ul style="list-style-type: none"> are able to describe the thinking skills used to solve a problem 	<ul style="list-style-type: none"> are able to select appropriate
	Self-regulation	<ul style="list-style-type: none"> recognise that making errors is part of learning 	<ul style="list-style-type: none"> identify things that worked well and those that did not begin to suggest goals for improvement 	<ul style="list-style-type: none"> are aware of own general make improvements to
	Strategy-planning	<ul style="list-style-type: none"> recognise it is possible to consciously select a given approach to solve a problem 	<ul style="list-style-type: none"> are aware of the main approaches that could be deployed 	<ul style="list-style-type: none"> choose an appropriate
	Intellectual confidence	<ul style="list-style-type: none"> begin to communicate own views based on experiences 	<ul style="list-style-type: none"> explain own views using examples and reasons 	<ul style="list-style-type: none"> present and justify own
LINKING	Generalisation	<ul style="list-style-type: none"> recognise simple patterns or similarities through observations 	<ul style="list-style-type: none"> use patterns, similarities and connections to make simple predictions 	<ul style="list-style-type: none"> identify and explain the develop generalisations apply generalisations to
	Connection finding	<ul style="list-style-type: none"> be aware that different facts may be connected 	<ul style="list-style-type: none"> make simple and obvious connections, but do not grasp their significance 	<ul style="list-style-type: none"> make a number of connections significance for the why use prior knowledge to
	'Big picture' thinking	<ul style="list-style-type: none"> begin to recognise that there are big ideas 	<ul style="list-style-type: none"> recognise there are big ideas and holistic concepts and begin to use them to make sense of things 	<ul style="list-style-type: none"> use big ideas and holistic between them to make
	Abstraction		<ul style="list-style-type: none"> conduct processes in the head as opposed to using concrete materials 	<ul style="list-style-type: none"> take ideas, issues, prot situations
	Imagination	<ul style="list-style-type: none"> form plausible solutions to simple problems, by asking 'what if?' 	<ul style="list-style-type: none"> envisage and create solutions in the mind to solve problems 	<ul style="list-style-type: none"> create novel solutions to
	Seeing alternative perspectives	<ul style="list-style-type: none"> recognise that different people have different perspectives 	<ul style="list-style-type: none"> consider different interpretations or views and distinguish between facts, beliefs and opinions are open to novelty 	<ul style="list-style-type: none"> weigh up the viewpoint them, challenge or adopt
ANALYSING	Critical or logical thinking	<ul style="list-style-type: none"> use information given to ask simple questions begin to use information to explore ideas 	<ul style="list-style-type: none"> ask relevant questions and select and organise appropriate information from a range of sources to find answers and develop understanding use selected information to explore ideas and make proposals 	<ul style="list-style-type: none"> identify questions and issues understanding select and organise evidence suggest answers based on process and manipulate
	Precision	<ul style="list-style-type: none"> begin to use simple symbols, conventions, vocabulary and language for the domain 	<ul style="list-style-type: none"> use simple symbols, conventions, vocabulary and language for the domain with some errors and omissions 	<ul style="list-style-type: none"> use skills, symbols, conventions errors or omissions
	Complex and multi-step problem solving	<ul style="list-style-type: none"> use a given approach to solve simple problems, ideas or tasks 	<ul style="list-style-type: none"> are aware that complex tasks can be broken down and understand the techniques for achieving this 	<ul style="list-style-type: none"> select and use appropriate explore more complex ideas
CREATING	Intellectual playfulness	<ul style="list-style-type: none"> are aware that there are rules in different domains ask 'what if...?' 	<ul style="list-style-type: none"> recognise the rules and conventions of different domains and choose some rules to disregard or change 	<ul style="list-style-type: none"> understand the complex some rules to modify, re
	Flexible thinking	<ul style="list-style-type: none"> be aware there are often different solutions to a problem 	<ul style="list-style-type: none"> be willing to abandon one idea in favour of another on the basis of reason and evidence 	<ul style="list-style-type: none"> adopt new ideas easily recognise some consequences
	Fluent thinking	<ul style="list-style-type: none"> brainstorm ideas, with help, in response to simple problems 	<ul style="list-style-type: none"> independently generate multiple solutions and ideas in response to more complex problems 	<ul style="list-style-type: none"> frequently propose to solve complex problems, evaluate
	Originality	<ul style="list-style-type: none"> create a slight variation to accepted ideas 	<ul style="list-style-type: none"> create several new ideas to address a problem, seeing possibilities others have not seen 	<ul style="list-style-type: none"> create a range of new ideas create an item
	Evolutionary and revolutionary thinking	<ul style="list-style-type: none"> create a new idea by building on existing ideas or diverting from them 	<ul style="list-style-type: none"> create several new ideas to address a problem by building on existing ideas or diverting from them 	<ul style="list-style-type: none"> create a range of new ideas and suggesting solutions choose a completely different
REALISING	Automaticity	<ul style="list-style-type: none"> recall simple key facts, concepts and ideas relevant to the stage of learning with some support 	<ul style="list-style-type: none"> recall more complex key facts, concepts and ideas relevant to the stage of learning and with increased independence show fluency in basic age-related tasks so they can be done without thinking, e.g. times tables 	<ul style="list-style-type: none"> independently recall concepts stage of learning exhibit fluency in an increasing
	Speed and accuracy	<ul style="list-style-type: none"> begin to develop relevant skills and use with some accuracy 	<ul style="list-style-type: none"> use relevant skills with increasing accuracy mostly work to the speed required for the task 	<ul style="list-style-type: none"> actively seek accuracy consistently complete tasks

Performance Characteristics (ACPs)

Stage 3	Stage 4	Stage 5
appropriate thinking skills to solve a problem	<ul style="list-style-type: none"> evaluate the range of possible approaches and select the most appropriate one(s) to improve efficiency 	<ul style="list-style-type: none"> use the full range of thinking skills fluently and comprehensively, including unconventionally
personal strengths and weaknesses to own practice and set future goals for improvement	<ul style="list-style-type: none"> evaluate outcomes of changes and justify amendments/ improvements to the strategy 	<ul style="list-style-type: none"> make insightful observations and comments to continually refine and improve own personal best
the approach to solve a problem or address an issue	<ul style="list-style-type: none"> choose the most appropriate strategy and be able to justify the approach 	<ul style="list-style-type: none"> Use strategy-planning independently as a way to solve problems or issues
own views using a diverse range of evidence	<ul style="list-style-type: none"> evaluate the views of others and incorporate relevant evidence to construct persuasive arguments including those they do not agree with 	<ul style="list-style-type: none"> synthesise a wide range of viewpoints and evidence to make a coherent and compelling personal argument
the connections between events, objects or ideas in relation to an existing situation	<ul style="list-style-type: none"> analyse similarities and differences between events, objects or ideas develop generalisations, recognising complexity apply generalisations to more complex situations 	<ul style="list-style-type: none"> understand the complexity of generalisations and apply these to a range of different situations with caution and justification
connections, although miss the meta connections and the whole to explain those links	<ul style="list-style-type: none"> actively seek out connections when learning transfer principles and ideas underlying one instance to another 	<ul style="list-style-type: none"> make connections not only within the given subject area, but also between and beyond subjects in inventive ways make novel, insightful and innovative connections which help to reconceptualise
holistic concepts and make connections within and between sense of experiences	<ul style="list-style-type: none"> start new learning by focusing on big questions and/or locate new learning within a bigger picture 	<ul style="list-style-type: none"> explore the complexities and uncertainties in big ideas and holistic concepts and accept they have limitations
problems or events and apply them to theoretical situations	<ul style="list-style-type: none"> work with a range of ideas, issues, problems or events in order to explain abstract, theoretical situations or models 	<ul style="list-style-type: none"> evaluate a range of ideas, issues, problems or events, develop and combine them and apply them to complex imagined or theoretical situations
solutions by drawing on prior knowledge	<ul style="list-style-type: none"> picture solutions that are plausible but not common, linking together extensive prior knowledge 	<ul style="list-style-type: none"> explore alternative or new plausible solutions using extensive interconnected prior knowledge
views of others, explain the influences that have shaped and adopt different ideas appropriately	<ul style="list-style-type: none"> critically evaluate the validity of viewpoints or arguments and objectively judge the evidence on which they are based, synthesising ideas where appropriate 	<ul style="list-style-type: none"> recognise that alternative viewpoints can be equally valid and be open to ambiguity question assumptions
begin to refine them to clarify and deepen understanding	<ul style="list-style-type: none"> prioritise questions to explore and develop relevant hypotheses judge the reliability, validity and limitations of evidence critically evaluate different sources of evidence use evidence to challenge assumptions 	<ul style="list-style-type: none"> ask perceptive and insightful questions and develop relevant hypotheses critically analyse and synthesise evidence and assess it for validity use robust evidence to develop compelling new ideas and hypotheses
evidence to explore questions and test hypotheses based on evidence available and assess it for validity		
conventions and vocabulary for the domain with few exceptions	<ul style="list-style-type: none"> use advanced skills, symbols, conventions and vocabulary effectively to reach strong outcomes 	<ul style="list-style-type: none"> select appropriate skills and conventions and use effectively to reach strong outcomes
appropriate methodologies to solve more complex problems, ideas or complete more complex tasks	<ul style="list-style-type: none"> evaluate the effectiveness of different approaches and identify a preferred personal repertoire 	<ul style="list-style-type: none"> use a broad range of approaches effectively, selecting those most appropriate for particular problems
flexible rules and conventions of different domains and choose to recognise some of the consequences	<ul style="list-style-type: none"> imaginatively adapt and bend the rules of a domain for a specific purpose, outcome or consequence 	<ul style="list-style-type: none"> use the rules flexibly, bending them where appropriate to create novel, fun or interesting outcomes
flexibility in response to convincing reason and evidence and sequences	<ul style="list-style-type: none"> expect to look beyond first ideas and seek others in order to select a best fit 	<ul style="list-style-type: none"> routinely think beyond the accepted approach and consider multiple ideas so as to create best-fit solutions
consider others solutions resulting from brainstorming ideas for evidence or issues	<ul style="list-style-type: none"> routinely seek to explore a wide range of possibilities before posing a solution to complex problems, evidence or issues 	<ul style="list-style-type: none"> create compelling ideas which demonstrate originality
new and unique modifications to address a problem or situation	<ul style="list-style-type: none"> create and model a range of new and unique ideas to address a problem recognising practical implications and conflicting demands 	<ul style="list-style-type: none"> insightfully create and model innovative and unique ideas and evaluate them
new ideas to address a problem, recognising limitations and ideas by building on existing ideas or diverting from them different way to address the task	<ul style="list-style-type: none"> create and model a range of new ideas to address a task recognising practical implications and conflicting demands by building on existing ideas or diverting from them 	<ul style="list-style-type: none"> create and model innovative ideas – both evolutionary and revolutionary, and evaluate them by building on existing ideas or diverging from them
complex key facts, concepts and ideas relevant to the increasing range of key skills	<ul style="list-style-type: none"> easily recall advanced key facts, concepts and ideas relevant to the stage of learning acquire new rules and use them fluently 	<ul style="list-style-type: none"> effortlessly use key facts, concepts and ideas relevant to the stage of learning draw upon a range of skills without the need to think or process
efficiency in work and understand its importance and work on time	<ul style="list-style-type: none"> achieve good levels of accuracy in work plan work and pace speed needed to complete it – even with multi-step tasks 	<ul style="list-style-type: none"> strive for and achieve excellent levels of accuracy in work work rapidly without errors



How do High Performing Learners behave?

- Collaborative
- Concerned for society
- Confident

Empathetic



- Enquiring
- Creative and enterprising
- Open-minded
- Risk-taking

Agile



- Practice
- Perseverance
- Resilience

Hardworking




Values Attitudes and Attributes (VAAs)


EMPATHETIC

	Collaborative	The ability to seek out opportunities to receive responses to your work; present your own views and ideas clearly and concisely; listen to the views of others; be willing and able to work in teams; take a variety of roles and be able to evaluate your own ideas and contributions.
	Concerned for society	The ability to know the contribution you can make to society for the benefit of those less fortunate; demonstrate citizenship and a sense of community ethos and recognise differences as well as similarities between people and peoples; be aware of your own and others' cultural heritage and sensitive to the ethical and moral issues raised by their studies.
	Confident	The ability to develop a belief in your knowledge, understanding and action; recognise when you need to change your beliefs based upon additional information or the arguments of others; deal with new challenges and situations, including when this places them under stress.

AGILE

	Enquiring	The ability to be curious; be willing to work alone; be proactive; keen to learn; show enterprise; think independently; challenge assumptions and require evidence for assertions; actively control your own learning; move on from the absorption of knowledge and procedures to develop your own views and solutions.
	Creative and enterprising	The ability to be open-minded and flexible in your thought processes; demonstrate a willingness to innovate and invent new and multiple solutions to a problem or situation; adapt your approach according to need; surprise and show originality in your work, developing a personal style; be resourceful when presented with challenging tasks and problems, using your initiative to find solutions.
	Open-minded	The ability to take an objective view of different ideas and beliefs; become more receptive to other ideas and beliefs based on the arguments of others; change ideas should there be compelling evidence to do so.
	Risk-taking	The ability to demonstrate confidence; experiment with novel ideas and effects; speculate willingly; work in unfamiliar contexts; avoid coming to premature conclusions; tolerate uncertainty.

HARD WORKING

	Practice	The ability to train and prepare through repetition of the same processes in order to become more proficient.
	Perseverance	The ability to keep going and not give up; face obstacles and difficulties but never give up; persist in effort; work diligently and work systematically; not be satisfied until high quality, appropriate precision and the desired outcome are achieved.
	Resilience	The ability to overcome setbacks; remain confident, focused, flexible and optimistic; help others to move forward in the face of adversity.

Values, Attitudes and Attributes:

Empathy



Creating the high performance learner is not just about learning how to think, it is about how to think responsibly and in a way that is effective in life and the workplace. The HPL student profile focuses on creating enterprising learners who exhibit leadership attributes in addition to being able to perform highly in school assessments and exams.

Essential Components of Empathy:

1. Collaborative
2. Concerned for society
3. Confident

1. Collaborative learners

Success is rarely the result of an individual working alone. Learners need to learn how to function in a team. They need to know:

- how to play the roles of both leader and follower
- how to negotiate putting their ideas forward for consideration while still listening to the views of others
- when to talk and when to listen • how to give and receive help • how to give and receive feedback.

Remember:

Some students are naturally inclined to be collaborative and find working with others straightforward. They may actually dislike working alone and need to learn that skill! For others this is much more difficult. They may be less sensitive to the signals others are giving; they may be shy or, conversely, over dominant; they may think faster or slower than others in the group and feel frustrated; they may be uncertain regarding their strengths and the contribution they can make to the team.

Successful learners are those who collaborate when needed. For some this will always be their route of choice and for others it will not. That is fine. What is important is that you help them learn the necessary skills so that they can collaborate effectively as this will be required from time to time

2. Concerned for society

Advanced learning includes the ability to deal with ambiguity and with complex problems. In recent years there has been increased interest in how schools develop the character traits in students which will make them good citizens. Ample opportunity exists for the nurturing of concern for society both through specific schemes and more generally through the day-to-day life of the school.

As a teacher you have a role to play in your lessons. If you draw attention to cognitive conflict within a topic – for example where there are two equally valid answers – then students become accustomed to grappling with complex and difficult questions. It is of course challenging when teaching to have to chair and manage differing or opposing opinions, but this is exactly where tolerance and good citizenship development occurs.

Concern for society can begin with quite simple ideas such as caring about others. Later it can also be nurtured formally within and beyond the curriculum. Many teachers do this already and it is a vital part of preparing students for their future lives. Ensuring that individuals have a moral compass which guides their decision making is an essential component of education and of high performance.

3. Confident

For high performance to occur the student needs to believe it is possible for them to become high performing. Having this inner confidence is crucial as it sustains them when learning becomes difficult.

The way you teach and the feedback that you give can be very powerful in building or reducing intellectual confidence in the same way as it can enhance or reduce self-confidence.

Remember:

- The more learning is presented as the development of a schema where each part fits with existing learning the more confident in their learning students become.
- Some students are innately confident and see setbacks as merely barriers to be overcome. Others are tentative and need to build the self-belief and confidence that they can master the task even if this does not occur at once. It is ok to struggle and it is ok to be wrong.
- In the same way, for some, critical feedback is merely a learning point whilst for others it is a personal disappointment which knocks their confidence. Sensitivity is required.
- Intellectual confidence and social confidence are not the same. Ideally you are looking to build both.

What do the Empathy VAAs mean for you as a teacher?

- Ensuring that students are life ready and work ready is just as important as ensuring they pass academic milestones.
- If you want students to develop the **empathy** VAAs you have to think how and when this will occur.
- Empathy is teachable and all students can learn to become more empathetic but progress is not age related. Some will demonstrate this early and some much later.
- Having concern for society and not just oneself can be nurtured in class.
- Some subjects lend themselves particularly well to developing concern for society. If yours is one then make best use of it.
- Intellectual confidence is vital for high academic results as students need to have the confidence to interpret questions on tests which are not presented in exactly the way they have been taught.
- Intellectual and social confidence are not the same thing. You need to help students to develop both. The way you teach is instrumental in determining how much intellectual confidence students acquire.

Values, Attitudes and Attributes:

Hard Working



Creating the high performance learner is not just about learning how to think; it is about how to think responsibly and in a way that is effective in life and the workplace. The HPL student profile focuses on creating enterprising learners who exhibit leadership attributes in addition to being able to perform highly in school assessments and exams.

The role of hard work in creating success has always been understood but we are now clear that it is a truly essential component in optimising life chances in education. No matter how easily you learn you will not be successful in the long run if you cannot, or do not, work hard.

Hard work is best encouraged by

- Making clear the purpose and benefits of working hard on the task or course
- Making the learning interesting and sometimes fun
- Not measuring the learning outcome on every piece of learning but rather at key points
- Offering rewards and incentives.

Hard work


In the contract between student and school the student must understand that high performance does not occur without hard work. Practice, persistence and resilience are key skills for developing high performance. They are also vital skills for adult success.

Students for whom the journey to high performance proves most difficult and most challenging are the ones who need to draw most strongly on these resources. Maybe this is why when they start to achieve success they often really take off and perform well over time.

Equally, it is important that those who perform well early are presented with opportunities that really challenge them. If they are allowed to coast then they do not develop these skills and at a later point they will find it difficult to persist or be resilient.

Essential Components of Hard Work:

1. Practice
2. Perseverance
3. Resilience



'It takes 10,000 hours to make an expert.'
Daniel Levitin

Practice

'Practice makes perfect' turns out to be absolutely the case. Daniel Levitin (2006) famously suggested that it takes 10,000 hours to make an expert. Even if this figure is not completely accurate we know that **the right practice** is a key factor in success.

Children will only become proficient in the required ACP characteristics if they have a chance to practise them frequently. Hence the ACPs need to be a feature of their daily educational diet throughout their schooling and students need to understand the importance of mastering them.

The HPL Fact Sheet on the ACP of Realising gives more detail on this topic.

Remember:

In your lessons practice should be the requirement for everyone, not just for those who fail to get the concept the first time around.

2. Perseverance

Looking at why some students with high scores on cognitive ability tests underperform at school, it is clear that the ability to persevere is often missing. The ability to keep going when the work is not so interesting is an important discipline and those who only become engaged when the learning is easy or fun will not become high performers. You can develop perseverance but it comes more naturally to some than others. Seeing the benefits and rewards of perseverance can be a motivator, so make sure you reward persistence.

Perseverance is a hot topic now in global education – we seem to have woken up to its importance! The task now is to help all students make perseverance a reality.

Remember:

Perseverance is linked to interest, to motivation, to attainable goals and to intellectual confidence.

It is important to recognise the value of hard work but without belief in one's own ability to succeed it becomes a demoralising experience

3. Resilience

We know from the life stories of successful adults that their lives were rarely problem-free and that the ability to bounce back was a critical factor in their eventual success. Students need to understand that setbacks are a natural part of progress and that developing the ability to be resilient is critical to long-term success.

In the workplace much attention is given to finding mechanisms which help the individual to be resilient. In school it is worth making students aware that what you do and how you react when you fail the first time is more important in determining success than the ability to get it right first time.

Remember:

The school context is not always best suited to building resilience, especially the secondary (high) school. Much of school is about achieving at a set time and in a set way. So students learn that initial failure is irrevocable. Resilience is about bouncing back when meeting setbacks and so it is particularly important that schools:

- make students aware that setbacks are natural and commonplace and that it is not the setback that is important but rather how you deal with it
- are explicit about the ways in which second chances are made available.

What do the *Hard Working* VAAs mean for you as a teacher?

- Ensuring that students are life ready and work ready is just as important as ensuring they pass academic milestones.
- If you want students to develop these **Hard Working** VAAs you have to think how and when this will occur.
- Hard work is teachable and all students can learn to become more hard working but progress is not age related. Some will demonstrate this early and some much later.
- Feedback to students should foreground valuing hard work.
- You need to use your reward systems to demonstrate that you value hard work.
- Stressing hard work as crucial to success is important and using the terminology of practice, perseverance and resilience in class can help to make this explicit

Values, Attitudes and Attributes:

Agility



Creating the high performance learner is not just about learning how to think, it is about how to think responsibly and in a way that is effective in life and the workplace. The HPL student profile focuses on creating enterprising learners who exhibit leadership attributes in addition to being able to perform highly in school assessments and exams.

The ability to be *agile* or nimble in learning is crucial to using and applying knowledge effectively. It is about the requirement to manipulate knowledge and use it in ways that maximise its impact or relevance. Agility is all about being able to 'think outside the box' – not just random ideas but finding creative versions of existing orthodoxies.

Essential Components of Agility:

1. Enquiring
2. Creative and enterprising
3. Open minded
4. Risk taking

1. Enquiring learners

Curiosity is at the heart of learning and those with an insatiable curiosity are often those who are willing to work hardest to achieve the mastery that will enable them to make sense of the world. They will practise and strive and this in turn results in high performance, so encouraging curiosity from the earliest age is useful. Sometimes formal schooling reduces the natural desire to enquire because the curriculum and teaching methods do not require it. You need to ensure that whatever age you are teaching curiosity is 'king' in your classroom.

As with other behaviours, if enquiry is encouraged and valued in class, it will be developed. It is teachable but it needs practice. Some might argue that certain curricular approaches aid curiosity and indeed that some testing regimes inhibit it, but as a teacher you should always be looking to institute a pedagogy that foregrounds curiosity regardless of a syllabus of assessment regime and this is as true for secondary (high) school students as it for with primary (elementary) learners.

Remember:

- Language and question-asking are crucial tools for expressing curiosity.
- Curiosity leads to knowledge, but it can also stir up trouble, and schools often have an incentive to quash it and instead promote compliance.

2. Creative and enterprising

Problem solving and enquiry-based approaches to learning can help students to think in creative and enterprising ways. The ACP characteristics are best developed through creative problem solving which requires the child to think for themselves.

This **resourcefulness** is an important skill in attaining high performance in all aspects of life. The ability to figure out what to do when it is not obvious is vital in areas as diverse as life and academic exams.

Freedom to roam

If you want to encourage students to be creative and enterprising you must create the time for exploration and be willing to deal with setbacks on the road to success. Being creative and enterprising is not a tidy or linear process and progress on the journey can be hard to recognise and certainly hard to assess.

3. Open minded

A limiting factor for some students in their learning is that they become inflexible in their thinking. If they are to achieve highly you need to encourage them to revisit their ideas from time to time and maybe revise them.

For many students open mindedness can be a struggle. This is especially so for those with strong views and opinions but also for those with few views of their own who are looking to others for guidance as to the 'right' view or opinion on any given matter.

The curriculum can be used to create opportunities for the development of individual viewpoints and this is indeed a key cognitive skill. But the curriculum can also be used to position opposing or multiple ideas and this can help students move beyond merely holding an opinion towards changing or adjusting their opinion in the light of new information.

Remember:

Brain research suggests that open mindedness may have a neurological, developmental aspect. Decision making in adolescence may be particularly modulated by emotion and social factors, e.g., when adolescents are with peers or in other affective ('hot') contexts. So retaining open-mindedness in adolescence may turn out to be more difficult than in later or earlier life. Blakemore (2012)

4. Risk Taking

Taking intellectual risks is a considered approach as opposed to an unthinking or rash act.

Successful learners know how to take intellectual risks and are willing to take them. But they will only do so if the penalties for failure are not too significant.

Encouraging risk taking

‘Well done for having a go’ should be as important in your classroom as
‘well done for getting it right’.

If your students are intellectually confident they are also more likely to be risk takers. This is because when they do not know the answer for certain they are more confident in creating a hypothesis about suitable answers rather than feeling helpless. So building intellectual confidence is step one in generating effective risk takers.

Remember:

Intellectual risk takers have been shown to be particularly successful in tests and exams.

What do the Agility VAAs mean for you as a teacher?

- Ensuring that students are life ready and work ready is just as important as ensuring they pass academic milestones.
- If you want students to develop the **agility** VAAs you have to think how and when this will occur.
- Mental agility is teachable and all students can learn to become more agile but progress is not age related. Some will demonstrate this early and some will struggle to master it.
- Encouraging curiosity and a thirst for learning will mean that students will strive more, persist more and feel greater satisfaction in their progress.
- The ability to make the most of knowledge is directly related to whether you can use and apply it effectively.
- Every subject benefits from agility of thinking

All great thinkers are agile thinkers. Does your classroom actively create agile thinkers?

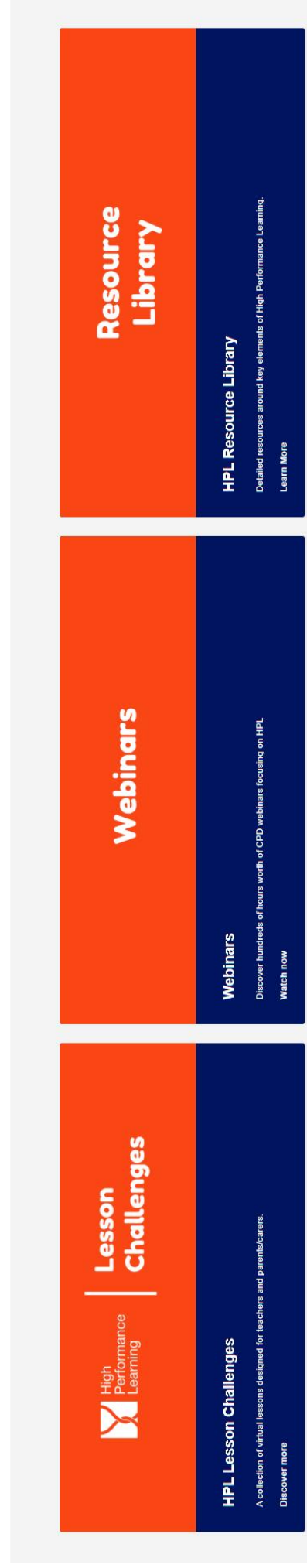
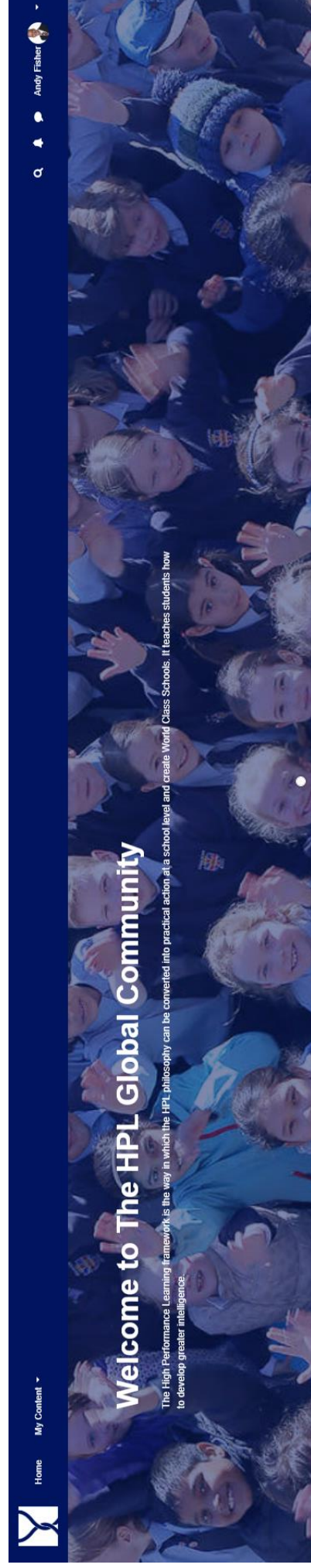
Progression Levels for the Values Attitudes

		Stage 1	Stage 2	
EMPATHETIC	Collaborative	<ul style="list-style-type: none"> talk in small groups and pairs about themselves listen to others in pairs and small groups and present and share their ideas demonstrate their listening skills by asking the speaker questions 	<ul style="list-style-type: none"> clearly articulate their own ideas to the group listen to the ideas of others and reinterpret these ideas in their own words using positive language begin to take on board suggestions from others in the group 	<ul style="list-style-type: none"> present confidently further down recognise the needs and start to help others see and experience
	Concerned for society	<ul style="list-style-type: none"> recognise the difference between right and wrong develop an awareness of who others are in the school and local community and have an opinion about change 	<ul style="list-style-type: none"> seek to help others in the class, school and local community and willingly participate in group activities to tackle issues have a sense of justice and rationalise why change is needed in simple terms identify projects in the community and suggest possible options to complete them 	<ul style="list-style-type: none"> willingly participate in global issues, identify those needs comfortably begin to help others develop a strong international
	Confident	<ul style="list-style-type: none"> realise there are things they know and understand and things they do not with help, admit their mistakes and learn from them 	<ul style="list-style-type: none"> articulate their knowledge, understanding and ideas listen to the ideas and opinions of others 	<ul style="list-style-type: none"> believe in their own ideas enjoy discussing with others deal with new
AGILE	Enquiring	<ul style="list-style-type: none"> begin to develop their natural curiosity identify, with guidance, questions and problems which interest them with guidance, plan to undertake research, and collect, store and organise information relevant to the research 	<ul style="list-style-type: none"> identify questions and problems and justify their interest in them plan and carry out research unaided, and collect relevant information identify the strengths and weaknesses of information and whether it is relevant to their enquiry, with guidance consider different viewpoints on issues, events or problems 	<ul style="list-style-type: none"> identify appropriate information to begin to research realise why communication is important consider ways to make a difference challenge assumptions and assertions
	Creative and enterprising	<ul style="list-style-type: none"> explore different solutions to problems that are set for them are interested in the world around them produce pieces of work that are original to them in form or content 	<ul style="list-style-type: none"> ask questions about their own learning and seek ways of finding their own answers create original work that demonstrates good outcomes in terms of quality and suitability for the task set 	<ul style="list-style-type: none"> experiment with different solutions decide on a course of action develop a plan for their work they are doing
	Open-minded	<ul style="list-style-type: none"> are becoming aware that other people may have different ideas and beliefs and come from different backgrounds 	<ul style="list-style-type: none"> recognise that other people may have different ideas and beliefs and are prepared to listen to them may change their mind based on the ideas and beliefs of others show an interest in people from other cultures and backgrounds 	<ul style="list-style-type: none"> can take a different perspective become more open-minded based on the evidence will change their mind based on the evidence appreciate the views of people from different backgrounds
	Risk-taking	<ul style="list-style-type: none"> realise that things we do involve an element of risk-taking talk about known risks in everyday situations and ways to approach those risks if they affect personal safety and wellbeing 	<ul style="list-style-type: none"> weigh up positive and negative risks in new situations and suggest different solutions and approaches to those situations based on their assessment confidently approach new and unknown situations, seeing them as a challenge to be faced 	<ul style="list-style-type: none"> try out new ideas and approaches speculate on the possibilities of new and unfamiliar situations
HARD WORKING	Practice	<ul style="list-style-type: none"> repeat work in order to improve 	<ul style="list-style-type: none"> practise regularly in order to improve understand the value of practice in improving performance respond to feedback from others about next steps to improvement and how to improve 	<ul style="list-style-type: none"> establish a routine seek and respond to feedback respond to challenges
	Perseverance	<ul style="list-style-type: none"> work for extended periods of time on a task with encouragement recognise that there may be obstacles to their progress 	<ul style="list-style-type: none"> work for sustained periods of time and can see the benefits of doing so identify distractions and begin to recognise the effect these might have on their work 	<ul style="list-style-type: none"> are self-motivated identify distractions and their effect on their work see the long-term benefits of completion
	Resilience	<ul style="list-style-type: none"> complete tasks with support, recognising some frustrations 	<ul style="list-style-type: none"> learn ways to manage their own time and work towards personal targets they have set complete longer tasks with increasing independence, recognising frustrations that inhibit performance 	<ul style="list-style-type: none"> show great resilience and targets use time effectively to complete tasks and overcome frustrations and setbacks

Views and Attributes (VAAs)

Stage 3	Stage 4	Stage 5
<p>confidently to other groups in the class and classes in the school about their work</p> <p>the role of others in development of ideas</p> <p>modelling the skills of collaboration to younger</p> <p>plain the advantages of collaborating</p>	<ul style="list-style-type: none"> tailor their presentation to meet the needs of their audience see the value of adapting their views and ideas to resolve issues, achieve shared goals and outcomes and help the group progress are aware that in different situations they need to take on different roles to develop or build on the strengths of others and get the job done 	<ul style="list-style-type: none"> present to groups outside of the familiar and outside of the school develop others in the group as collaborators by putting them in new and unfamiliar situations and not just playing on their strengths know to whom to assign different roles in order to complete a task based on others' strengths and experience
<p>participate in the community (both local and national)</p> <p>identifying needs and courses of action to meet these</p> <p>work with others to meet those needs</p> <p>have an understanding of human rights</p> <p>stronger sense of justice, drawing on past events</p>	<ul style="list-style-type: none"> develop critical opinions on global issues and comfortably debate these using evidence adjust personal behaviour to fit belief systems and have a strong sense of their place in the world understand the relationship between the rights of the individual and the laws of society appreciate the benefits of a diverse society 	<ul style="list-style-type: none"> take proactive and direct action to help in the wider community analyse how different circumstances, belief systems and emotions influence events and act independently according to their own belief systems proactively initiate issue-based campaigns challenge injustice and take the needs of present and future generations into account
<p>their knowledge, understanding and ideas</p> <p>using their beliefs, ideas or behaviours with others</p> <p>new challenges and situations</p>	<ul style="list-style-type: none"> justify their beliefs, ideas or behaviours realise when they may need to change beliefs, ideas or behaviours based on new information or the arguments of others enjoy new challenges and situations 	<ul style="list-style-type: none"> critically reflect on their knowledge, understanding and ideas in the light of new experiences and interaction with others know when to modify their knowledge, understanding and ideas based on their critical reflection seek new challenges and situations
<p>appropriate research steps and strategies, and refine and modify methods of enquiry</p> <p>which information is useful and relevant and evaluate analysis in an appropriate ways</p> <p>why there are different viewpoints, and begin connections between them</p> <p>assumptions and make evidence-based decisions</p>	<ul style="list-style-type: none"> explain their research techniques to others, describing and justifying the methods they have chosen begin to teach others the skills of enquiry make informed and well-reasoned decisions and require evidence for others' assertions 	<ul style="list-style-type: none"> independently identify questions and problems, justify their interest in them, and critically consider whether they are worth asking and solving use connections from across the curriculum to develop their enquiry, answering questions that are of real value to society both in school and outside.
<p>work with unfamiliar approaches or forms and choose the right ones for the right circumstances</p> <p>sense of their own personal style in the work they create</p>	<ul style="list-style-type: none"> choose increasingly innovative approaches to solving problems and creating work are able to adapt to a wide variety of purposes and audiences without sacrificing quality 	<ul style="list-style-type: none"> provide original and elegant solutions to complex problems create novel and surprising pieces of work of high quality that are fit for purpose
<p>an objective view of different ideas and beliefs</p> <p>more receptive to different ideas and beliefs</p> <p>the argument of others</p> <p>justify their ideas should there be compelling reasons to do so</p> <p>the benefit of knowing, and working with, people from other cultures</p>	<ul style="list-style-type: none"> evaluate new information or the arguments of others and are willing to change beliefs, ideas or behaviours based on their evaluation evaluate cultural perspectives by drawing on the views of people from other cultures and backgrounds when forming opinions 	<ul style="list-style-type: none"> seek out new information and the arguments of others in order to reflect critically on their knowledge, understanding and ideas and modify them on the basis of their critical reflection systematically take a considered global stance when approaching new ideas
<p>work ideas in different situations, drawing on past experience</p> <p>reflect on the outcomes of taking certain risks in different situations</p>	<ul style="list-style-type: none"> recognise that we cannot always predict the outcome of a situation – that some things in life are unknown approach unfamiliar situations positively, and with confidence and acceptance of the unknown 	<ul style="list-style-type: none"> speculate and take risks in a whole variety of situations, known and unknown assess situations in terms of personal safety and wellbeing confidently tackle new challenges and make different decisions based on understanding of previous decisions and mistakes
<p>and follow practice schedules</p> <p>respond to feedback on how to improve</p> <p>goals set by others for improvements</p>	<ul style="list-style-type: none"> take responsibility for practising independently and regularly jointly set goals for improvements monitor own performance and seek feedback from others 	<ul style="list-style-type: none"> self-regulate and revise practice schedules in line with improvements set own goals and monitor progress towards them actively seek out ways to improve
<p>motivated to work on extended projects</p> <p>frustrations and manage them to minimise negative impact</p> <p>long-term benefits of performing a task to completion</p>	<ul style="list-style-type: none"> independently plan an activity or project beyond what is asked of them identify and use strategies for setting and meeting personal targets in order to increase personal motivation 	<ul style="list-style-type: none"> recognise and accept that making mistakes is a natural part of learning, and can explain this to others have enough self-awareness and confidence to accept that some tasks cannot be completed
<p>interdependence in setting personal goals</p> <p>persist with extended tasks</p> <p>effectively and persist with extended tasks</p> <p>frustration, recognising strategies, overcoming distractions and seeing the long-term</p>	<ul style="list-style-type: none"> self-manage extended and complex tasks to completion employ appropriate strategies to complete tasks and consistently overcome frustrations and barriers 	<ul style="list-style-type: none"> select and self-manage extended and complex tasks consistently to completion are deliberately unwilling to allow adversity to prevent them from reaching their goal and are unwavering in their focus on their eventual success

There are a wide range of CPD materials and resources available to support your teaching at HPL Online and all staff at Caroline Chisholm have access to this useful resource. Your login details are available from Adrian Colman and the URL of the site is: <https://members.highperformancelearning.co.uk/>





High
Performance
Learning

Features of World Class Schools

1	They start by focusing on the profile of the type of student they want to develop and build their accountability measures around this.	6	They see the school as a well-oiled machine that can deliver the same high standards for students year on year and regardless of background.
2	They select a core curriculum that is overall well-suited to their vision and then audit it in order to enhance and supplement where needed including via the enrichment offer.	7	They are purposeful but also relaxed with both students and staff at ease in the school.
3	They make explicit to students (and parents) what they are trying to achieve and how they should participate.	8	They place a high level of trust in their teachers and their students and structures assume timely intervention and benchmarking rather than constant monitoring.
4	They are confident on behalf of their students who feel they can trust the school to help them be successful.	9	Internal accountability precedes external accountability and they take ownership for their own performance.
5	They see personal and pastoral support and guidance as crucial to academic success.	10	Everyone feels an emotional attachment to the school but they don't see themselves as world class because they are never complacent and are continually seeking to refine and improve.