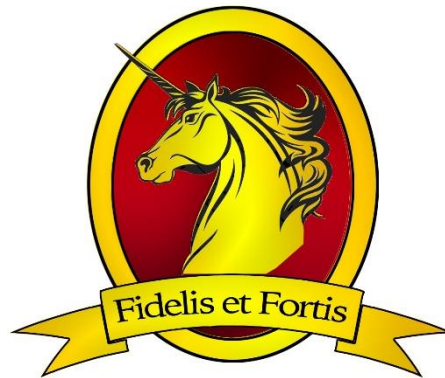


## James Gillespie's High School



## LEARNING, TEACHING & ASSESSMENT POLICY



‘Excellence in learning and teaching through a culture of sharing best practice and professional learning’

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# LEARNING, TEACHING & ASSESSMENT POLICY

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## INTRODUCTION

This policy sets out the approach we take at James Gillespie's High School to ensure all of our pupils experience the highest standards of learning and teaching. The policy is supported by the *JGHS L&T Toolkit* which is an online resource providing evidence based practical techniques and strategies to enhance learning.

### Rationale

We recognise that the single biggest factor in improving outcomes for children and young people is collective teacher efficacy<sup>1</sup>, or to put it simply - the collective belief of teachers that we make the difference. As such, we have a very clear vision:

*‘Excellence in learning and teaching through a culture of sharing best practice and professional learning’*

We recognise that learning is a lifelong process for us all and one to which we, as a school community, make a significant and lasting contribution.

### Aims

This Learning, Teaching & Assessment Policy provides a framework for how together, we plan to achieve our key aims:

- All learners engaged and supported in lessons.
- Students aware of what they are *learning*, not just *doing* in lessons.
- Students are aware of what success in lessons looks like.
- Effective feedback provided so pupils understand their own learning.
- Assessment is used effectively for learning.
- We have a consistent approach to lessons and learning.
- A wide variety of effective learning and teaching techniques used.
- A culture of sharing best practice has been created amongst all staff.
- We are all committed to improving through professional learning opportunities.

## LESSON STRUCTURE

### A 'typical' lesson

High-quality lessons at JGHS will be based on the four phase model. We realise there needs to be flexibility to adapt this at times, however, typically the following elements would be included:

- **Phase 1: Starter / Daily Review**  
A review of prior learning  
**Learning intention**  
Making clear the specific things students should be learning  
**Success criteria**  
Making clear what success will look like
- **Phase 2: Presentation of content**  
Teacher led instruction / demonstration of planned activities
- **Phase 3: Practice**  
Students undertake purposeful active learning activities
- **Phase 4: Plenary Review**  
A review of progress made in this lesson

There will also be:

Appropriate support and challenge for everyone - *differentiation*.

Opportunities for feedback, which may be whole-class or individually.

### Understanding the 4-Phase model

It is important to note whilst this model will usually form the structure of most lessons there will be circumstances where alternative models will be used.

It is also worth noting that just because learning intentions and success criteria will be discussed at the start of a lesson that does not mean they are 'done' at this point. Pupils will be reminded of these as they progress through the lesson and they will be of particular importance during the plenary when we are assessing the quality of learning that took place.

## Starter / Daily Review

Starter tasks help set the tone for the lesson. When done well, they get pupils engaged, thinking and focused as soon as they enter the lesson as well as providing a valuable opportunity to review prior learning. This could be from the previous lesson, earlier in the topic or even from previous topics.

## Learning intention & Success criteria

It is important that students know where they are going in their learning and what counts as quality work. The key is that ‘learning intentions without success criteria have a much lower effect.’<sup>2</sup> It is not, what are we doing today? It is, what are we learning today? And how would we know when we get there? There is no simple formula for doing this. It is up to the teacher to exercise professional judgement in how best to communicate learning intentions and success criteria.

*Examples along with research in this area are given in the JGHS L&T Toolkit.*

## Presentation of content

It is important that we check for understanding in the middle of an instructional sequence. In this regard, the question we should ask ourselves is ‘How well do our questioning strategies enhance the learners’ experience and enable higher-order thinking skills?’<sup>3</sup>

We must acknowledge that what their students learn is not necessarily what they intended, and this is inevitable because of the unpredictability of teaching. ‘Thus, it is essential that teachers explore students’ thinking before assuming that students have understood something.’<sup>4</sup>

*Questioning techniques are looked at in more detail in page 10 of this document in addition to examples along with research detailed in the JGHS L&T Toolkit.*

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[2] John Hattie, *Visible Learning for Teachers* 2012  
[3] Tom Sherrington, *The Learning Rainforest* 2017  
[4] Dylan Wiliam, *Embedded Formative Assessment* 2011

## Practice

Students benefit from frequent opportunities to work independently, and in pairs and in groups, thus increasing their confidence and sense of achievement. This may take the form of supported practice<sup>5</sup>, which can be summarised as a five-step process within the body of a lesson.

| Step | Lesson segment | Who is doing what?          | Typical statement   |
|------|----------------|-----------------------------|---|
| 1    | Teacher        | Teacher does                | The first step in adding fractions with unlike denominators is to...  |
| 2    | Both           | Teacher does; student       | Let's see if you've got it. How did we say we were going to make your denominators equal?   |
| 3    | Both           | Student does; teacher helps | Just to be clear that you understand, I need you to walk me through the process. What do I start with when adding fractions with unlike denominators? |
| 4    | Student        | Student does                | Now that we have solved- this example, try one of your own  |
| 5    | Student        | Student does, and does      | We seem to be getting it so spend the next 6 minutes working on the problems I've provided and then I'll review where I think we are up to.           |

These steps have been shortened in the diagram below illustrating steps 5,7 & 9 of the ten *Rosenshine Principles of instruction* (strand 4 'Stages of Practice' in Sherrington's interpretation) <sup>6</sup>.



The idea behind scaffolding is that 'cognitive supports' are provided and are gradually withdrawn as a student gains competency. In this way, scaffolding can help to develop a student's expertise and mastery in a subject.

[5] Doug Lemov, *Practice Perfect* 2012

[6] Tom Sherrington, *Rosenshine's Principles in Action* 2019

## Plenary Review

The end of a lesson is a crucial point to elicit understanding, in line with the aims of our lesson and the success criteria identified. We recognise there is a difference between knowing you have taught something, and the young people in our classes having learnt it.

The plenary is the perfect opportunity to check if the key ideas and knowledge that have been taught that lesson have been grasped by the class.

*Examples along with research in this area are given in the JGHS L&T Toolkit.*

## LEARNING IN LESSONS

### Key Features of Effective Lessons

Within the structure of the 4-Phase Model, there are many key features of effective lessons which our teachers use as appropriate...

- |                                   |   |
|-----------------------------------|---|
| ➤ Lesson Starters                 | ➤ Effective questioning                     |
| ➤ Review/Recap                    | ➤ Focussed Learning Conversations           |
| ➤ Shared Learning Intentions      | ➤ Pupil led learning                        |
| ➤ Shared Success Criteria         | ➤ Active learning                           |
| ➤ High quality feedback           | ➤ Staged Practice                           |
| ➤ Peer and Self-assessment        | ➤ Pair/Group Learning                       |
| ➤ Differentiation/Extension tasks | ➤ Higher Order Thinking Skills <sup>7</sup> |
| ➤ Scaffolding                     | ➤ The effective use of ICT                  |
| ➤ Modelling                       | ➤ Plenary                                   |

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[7] Anderson, L. W., Krathwohl, D. R., & Bloom, B.S. 2001 *A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of educational objectives*



## Pace and Challenge

Our lessons should be well paced with all tasks and activities planned with an appropriate duration according to the age, stage and ability of our students. As this often varies significantly within a class, our lessons are differentiated to ensure we still provide the appropriate degree of pace challenge for all of our learners. We are committed to stretching our more able students and supporting those who need it. This inclusive practice is at the centre of what we do.

## Differentiation & Support

By 'differentiation' we mean ensuring *all* learners are effectively supported and challenged to achieve their full potential. This starts at the lesson planning stage and adapts during the lesson to meet the needs of all learners.

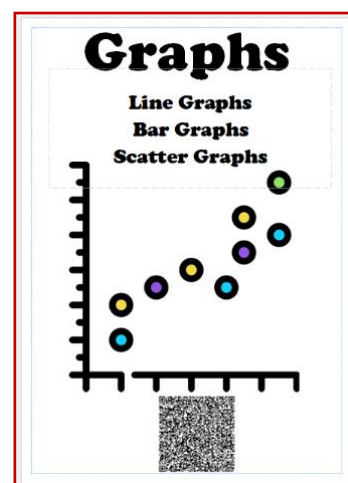
Our more able students are stretched through a variety of methods from the tasks we set, the higher order thinking skills and effective questioning techniques we use as well as flipped learning tasks where appropriate.

Our improvement plans at whole school and faculty level have a focus on differentiation and in particular supporting our students who need help with their learning.

A particular focus has been on differentiation by environment where QR codes have been used in conjunction with our Empowered Learning digital programme to provide individual support to develop identified skills as appropriate.

Our support for Learning Faculty including our Pupil Support Assistants continue to support our learners in classes as well as helping teaching staff develop their practice in differentiation techniques.

Staff also consult individual pupil information contained within our 'Rainbow sheets' when considering how best to support pupils in classes. Our inclusive classroom approach can be developed further by accessing the CIRCLE<sup>8</sup> document through our *JGHS L&T toolkit*.



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[8] CIRCLE collaboration, *Inclusive Learning & Collaborative Working* 2016

## Questioning Techniques

*Great questioning is the hallmark of a really effective teacher and sits right at the top of the list for things teachers can and should improve<sup>3</sup>.*

When asking questions, we encourage teachers to think about *what* they are asking and *how* they are asking it. Teachers should reflect on the balance of **closed and open questions** - both are important to effective teaching and learning.

When asking verbal questions, we encourage teachers to use the following approach:

1. **Pose** - ask the question to the class;
2. **Pause** - allow appropriate thinking time. Expect everyone to think about the answer. Don't let students shout out;
3. **Pounce** - ask someone to answer the question or relay the pair/group's answer;
4. **Bounce** - ask someone else if they agree with the answer that has been given. Ask them why they agree or disagree. Ask someone to build on or add to the answer that has been given. Expect everyone to be listening to each other's answers.

In addition to this, there is a huge range of questioning techniques, some of which are exemplified in the *JGHS L&T Toolkit*.

The answers that students give to questions should be used to make teaching points to the whole class. Within this direct teaching, the teacher should give examples and non-examples, and make clear common misconceptions and errors. They should share useful strategies to remember things and make a point of repeating key content.

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[3] Tom Sherrington, *The Learning Rainforest* 2017

## Digital Technology and ICT

We have a School Improvement Team who support teachers in using digital technology to enhance learning and teaching. Through The City of Edinburgh Council's 'Empowered Learning Programme' our students are provided with their own iPad to both enhance learning and provide equity at school and at home.

The *JGHS L&T Toolkit* provides examples of how this technology can enhance learning and provide support for students where needed including those where English is an Additional Language (EAL). It also contains information and guidance on subject specific apps to maximise the effectiveness of this technology for learning.



## ALL ASSESSMENT IS FOR LEARNING (AifL)

Formative assessment is usually thought of as the core of the Assessment is for Learning programme. However, this is only one of three AifL strands. The other two, assessment as learning (personal learning planning) and assessment of learning (summative), have equally important roles in providing the broader objective of an assessment system that can meet the needs of everyone involved in the education process.

If formative assessment is the starting point, wider AifL aims will not be achieved if teachers do not progress to the other strands<sup>9</sup>. We aim to provide a consistent and comprehensive approach to classroom assessment.

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[9] Wiliam D. & Black P, *Assessment and Classroom Learning* 1998

## **Formative Assessment**

### **Assessment for learning**

In many of Dylan Wiliam's talks and publications he references five 'key strategies' that support the implementation of effective formative assessment.

1. *Clarifying, understanding, and sharing learning intentions*
2. *Engineering effective classroom discussions, tasks and activities that elicit evidence of learning*
3. *Providing feedback that moves learners forward*
4. *Activating students as learning resources for one another*
5. *Activating students as owners of their own learning* <sup>4</sup>

The *JGHS L&T Toolkit* provides examples of effective practice in these areas and some of the original research behind them.

## **Learner conversations (Personal Learning Planning)**

### **Assessment as learning**

A learner conversation is shared discussion, that supports both staff and pupils, to ensure the learner knows how to progress their learning, to achieve their potential. These take place periodically but typically after key assessments in a subject.

The aims of our learner conversations are:

- To support reflection from the learner about their current progress
- To support critical thinking from the learner to identify areas for development
- To highlight barriers or challenges of the learner
- For the learner to set goals/targets to achieve their potential

## **Summative Assessment**

### **Assessment of learning**

We aim to have valid, reliable and robust summative assessments at key points throughout a course. This provides the student, teacher and parents/carers with an accurate assessment of learning and progress at these points. Together we can then plan next steps towards achieving student targets. Timelines showing these key assessments are displayed on class MS Teams pages.

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[4] Dylan Wiliam, *Embedded Formative Assessment* 2011

## Homework

Students consolidating their learning at home is an important factor in helping them to progress in their learning. There is research to suggest that homework has little impact on improving learning in primary schools, however, in secondary schools the benefits of homework are clear. The research demonstrates that homework based around reinforcing prior learning, practice and rehearsal, with close teacher involvement is key to eliciting the largest benefits [Appendix 2].<sup>10</sup>

The frequency and duration of homework exercises will increase as students progress through the school. Individual subjects will share their expectations around homework with learners and parents/carers.



## HOW ARE WE DOING?

In recognising that the quality of learning and teaching our students experience is a major factor in the outcomes they achieve, it is crucial that we aim to deliver the highest standard we can. Key to this is monitoring and evaluating our performance as teachers, sharing best practice and undertaking professional learning for improvement.

### Evaluating the impact of lessons

By making use of formative assessment towards the start of a lesson, during a lesson, and towards the end of a lesson, students and teachers can get a feel for what has changed as a result of the lesson, supported by evidence. This helps students to self-evaluate their learning and teachers to evaluate the impact of the lesson, informing next steps and the next lesson.

When assessing the impact of lessons on student learning, as far as possible, teachers should be using strategies that we evaluate the learning of *everyone*.

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[10] John Hattie, *Visible Learning: The Sequel* 2023

## Lesson Evaluation Framework

To support teacher planning and self-evaluation of pedagogy, we will be using a school Lesson Evaluation Framework [Appendix 1]. This has been informed by the national self-evaluation document *How Good Is Our School?* 4<sup>th</sup> Edition, the GTCS Professional Standards and international research.

## Evaluating Learning and Teaching

As a general rule, we ask that teachers ensure that learning and teaching in lessons follows the four phase model and is informed by our Lesson Evaluation Framework. When we undergo observation cycles to evaluate learning and teaching, this will form the basis of our discussions.

We believe that for learning to be taking place, students must be expected to think. This is what we mean by *active learning*. Rosenshine's 'Principles of instruction' divided in a practical, concise way into four strands by Sherrington, outline of how this would look in a typical lesson <sup>11</sup>.

Our teacher's take part in continual cycles of observations taking various forms with different focuses throughout the session. Some examples of these are:

- **'Pop' in visits**

**These aim to build a culture of Sharing Classroom Experience between staff**

- 10-15 minute observations between teacher pairs
- Focus agreed between teachers

- **Observation 'Bingo'**

**Gain expertise on a particular focus through several SCE experiences.**

- 10-15 minute observations across several staff/departments
- Common focus set based on whole school L&T priorities

- **Learning Trios**

**Professional discussion on L&T following a round of observations.**

- 30 minute observations between 3 staff (1 teaching, 2 observing)
- Common focus based on whole school L&T priorities

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[11] Tom Sherrington, *Rosenshine's Principles in Action* 2019

## ▪ L&T Faculty WalkThrus

Evaluating the L&T in a faculty over a two week period.

- 30 minute observations involving all teaching staff, CL and SLT.
- Focus set through faculty or whole school Self-Evaluation.
- Comprehensive feedback provided to all participants.

## OUR OWN PROFESSIONAL LEARNING

We aim to continually develop pedagogy across the school via our Sharing Classroom Experience observation cycles. The Learning and Teaching WalkThrus in particular offer a Supported Self-Evaluation opportunity, leading to professional learning on identified areas.

### What makes the biggest impact?

John Hattie developed a way of synthesizing various influences in different meta-analyses according to their 'effect size' [Appendix 2]. He originally ranked 138 influences (updated to 150) that are related to learning outcomes from very positive effects to very negative effects. Hattie found that the average effect size of all the interventions he studied was 0.40. Therefore, he decided to judge the success of influences relative to this 'hinge point', in order to find an answer to the question *"What works best in education?"*

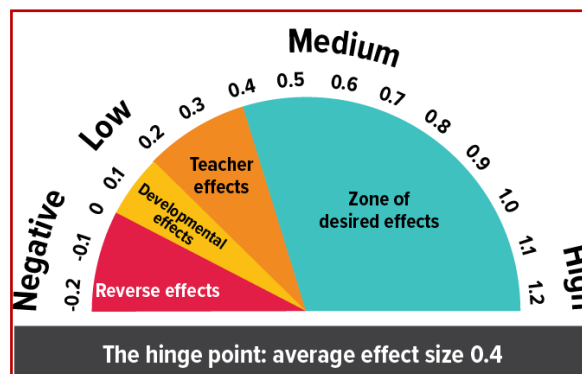
His research is now based on over 2000 meta-analyses, more than 130 000 studies and over 400 million students world-wide.

## Improving our pedagogy

In aiming to improve our pedagogy, we will consider these effect sizes when deciding where to focus our professional learning and development.

Appendix 2 shows selected effects in the ‘zone of desired effects’ (effect size over 0.4) with some detail as to what this looks like in practice.

This will allow us to focus our efforts on the factors which have the greatest influence on student learning.



[10] Adapted

Our professional learning can take many forms and is reviewed annually in teacher professional review and development meetings. Improving pedagogy should feature within these meetings and staff directed towards professional reading, courses and other learning opportunities as appropriate.

## The JGHS L&T Toolkit for *our* Learning

As well as providing practical examples and techniques for teachers use to aid the learning of our students, the *JGHS L&T Toolkit* also acts as a valuable learning resource for our teachers. Each technique is supported by research and background reading around the particular topic. This allows staff to explore the pedagogical approaches in more depth, providing staff with a deeper understanding of the effect this has on learning. This enables teachers to have the confidence and belief that their approach will have a significant positive impact on our learners.



## REFERENCES

- [1] John Hattie, *Visible Learning Study*, 2008
- [2] John Hattie, *Visible Learning for Teachers*, 2012
- [3] Tom Sherrington, *The Learning Rainforest*, 2017
- [4] Dylan Wiliam, *Embedded Formative Assessment*, 2011
- [5] Doug Lemov, *Practice Perfect*, 2012
- [6] Tom Sherrington, *Rosenshine's Principles in Action*, 2019
- [7] Anderson, L. W., Krathwohl, D. R., & Bloom, B.S. *A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of educational objectives*, 2001
- [8] CIRCLE collaboration, *Inclusive Learning & Collaborative Working*, 2016
- [9] Wiliam D. & Black P, *Assessment and Classroom Learning* 1998
- [10] John Hattie, *Visible Learning: The Sequel* 2023
- [11] Tom Sherrington, *Rosenshine's Principles in Action* 2019

Review date: June 2025



## Appendix 1: Lesson Evaluation Framework

*Supporting the continuous improvement of learning and teaching across our school*

Our Lesson Evaluation Framework is designed to help the teaching in our school to continuously improve. We use it to support learning, self-evaluation, coaching and discussion. It is a professional learning aide - it is **not** a tick list. Typical elements in a high quality lesson are listed for comment as appropriate.

|   |                        |
|---|------------------------|
| <b>Teacher:</b>   | <b>Observer:</b>       |
| <b>Date:</b>  | <b>Class observed:</b> |
| <b>Agreed focus:</b>  |                        |
| <b>Phase 1: Starter / Daily Review</b><br><br>1. Assessment is used to <b>find out what students already know / can do</b> i.e. where students are in their learning.<br><b>Retrieval practice</b> - recall from current, recent and less recent material.<br><br>2. The <b>purpose (learning intention)</b> of the lesson is clear.<br>Revisited during lesson and in plenary.<br><br>3. Appropriate <b>success criteria</b> are shared / used.<br>Clear communication of what success looks like.<br>Revisited during lesson and in plenary.<br>( <i>Don't differentiate success criteria</i> ).  |                        |
| <b>Phase 2 &amp; 3: Presentation of content &amp; Practice</b><br><br>4. <b>Communication (explanations and instructions)</b> is clear<br>- verbally and visually.<br><br>5. Presentation is <b>interactive</b> - repeating and summarising key points and frequent checks for understanding.<br><br>6. <b>Active learning</b> strategies are used to engage students, stimulate interest and make them think and <b>Assessment is for Learning</b> strategies ( <b>Formative Assessment</b> ) used to illicit understanding e.g. questioning (point 7).<br><br>7. <b>Questioning</b> is used skilfully to engage <i>all</i> students and to make them think and make their thinking visible.<br>- 'Show-me' boards or iPad 'Sketch book' app.<br>- Questioning: pose, pause, pounce, bounce<br>- Discussion (chat to partner, think-pair-share)<br>- True/False, multiple choice, deliberate mistakes<br><br>8. The lesson includes opportunities for <b>practice</b> ,<br>- guided, supported then independent.<br>- lots of opportunities to master content<br>- teacher circulating class<br><br>9. Differentiated <b>challenge and support</b> ( <i>not different content or tasks</i> ) e.g. via<br>- teacher support<br>- peer support<br>- scaffolds<br>- choices within activities |                        |

|   |  |
|---|--|
| <p>10. <b>Digital technology</b> is used to support learning or enhance learning where appropriate.</p> <p>11. <b>Feedback</b> to students is high quality and advances learning</p> <ul style="list-style-type: none"> <li>- specific, clear and precise.</li> <li>- supportive: what, how and next steps</li> <li>- links to success criteria</li> <li>- individual and whole class messages</li> <li>- time available for students to act on feedback</li> </ul> <p>12. Students <b>learn from each other</b> and support each other's learning i.e. there is discussion and/or collaborative / co-operative learning.</p> <p>13. Students have opportunities to <b>lead their own learning and the learning of others</b> e.g. through choices, self-assessment or peer-teaching.<br/><i>(This should only be used once students have first developed a high level of knowledge and understanding of content.)</i></p>                                |  |
| <p><b>Phase 4: Plenary Review</b></p> <p>14. Revisits learning intentions and success criteria.</p> <p>15. <b>Students evaluate their understanding and progress</b> from the lesson.</p> <p>16. The <b>teacher evaluates the impact of the lesson on student understanding</b>, based on evidence, and forms next steps.</p> <p><b>NOTE:</b> Pupil understanding from this lesson only really becomes 'learned' once it moves into long-term memory. This can be achieved through <i>retrieval practice</i> throughout subsequent lessons e.g. in the Daily Review.</p>  |  |
| <p><b>Learning environment</b></p> <p>This section is underpinned by our school values of:<br/><i>Respect, Kindness, Integrity, Inclusion and High Expectations.</i></p> <p>17. <b>Positive relationships</b></p> <ul style="list-style-type: none"> <li>- know students well and have positive interactions</li> <li>- sincere and meaningful use of praise.</li> </ul> <p>18. <b>High expectations</b> of effort, progress and quality of work. Target goal setting in learner conversations at appropriate stages in pupil learning.</p> <p>19. <b>Classroom management</b> enables a calm, ordered, safe controlled learning environment. Effective use of space, time and resources, including ICT.<br/>Appropriate pace.</p> <p>20. Expectations on <b>student behaviour</b> are clear. Students are on task, engaged, interested and motivated. Poor student behaviours are dealt with promptly and calmly in line with our Stage 1-4 process.</p> |  |

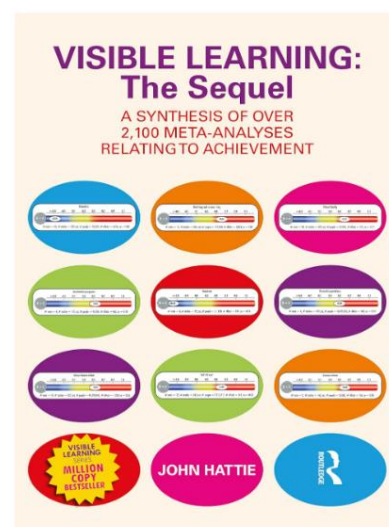
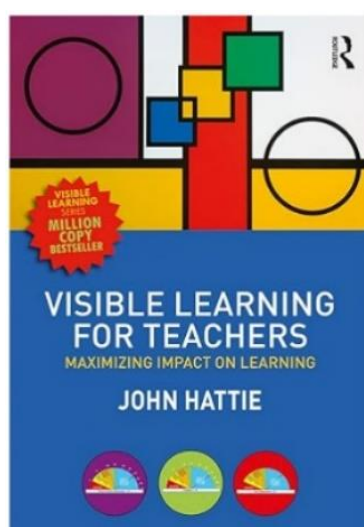
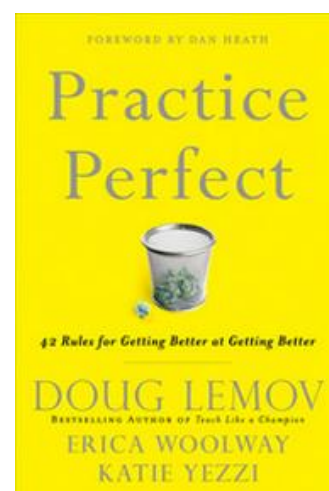
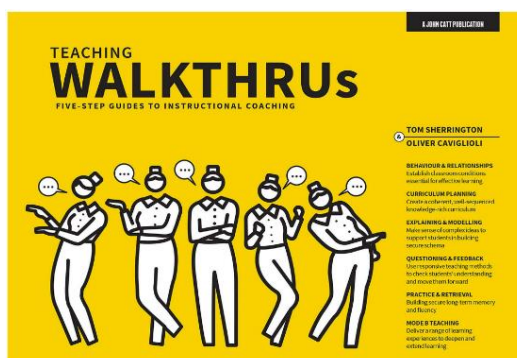
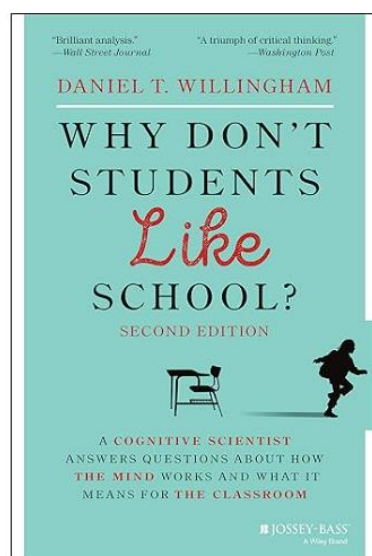
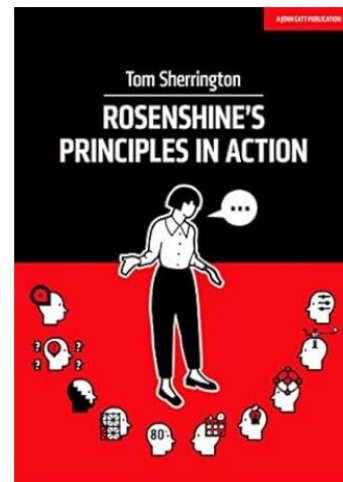
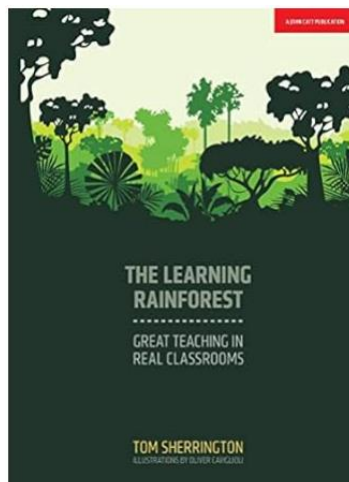
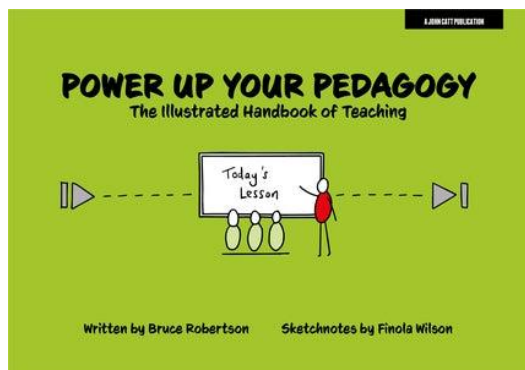
## Appendix 2: Selected 'Effect Sizes' <sup>10</sup>

| Pedagogical practice | Details  | Effect size |
|----------------------|--|-------------|
| Classroom discussion | Classroom discussion allows students to improve communication skills by voicing their opinions and thoughts. Teachers also benefit from classroom discussion as it allows them to see if students have learnt the concepts that are being taught. Moreover, a classroom discussion creates an environment where everyone learns from each other.   | 0.82        |
| Teacher clarity      | Ensuring a clear lesson purpose; clear explanations; clear demonstrations; practice tasks clearly focused on the lesson purpose; checking that students have a clear understanding on the new material.<br><br>Clear learning intentions describe the skills, knowledge, attitudes and values that the student needs to learn. Teachers need to know the goals and success criteria of their lessons, know how well <i>all</i> students in their class are progressing, and know where to go next. | 0.75        |
| Feedback             | Feedback on task and process is far more effective than on the self-level (e.g. praise which contains no learning information). Descriptive feedback is closely related to providing formative assessment.<br><br>The most powerful feedback can also be that given from the student to the teacher -this feedback allows teachers to see learning through the eyes of their students.   | 0.73        |
| Concept mapping      | These serve several purposes for learners, including: helping students brainstorm and generate new ideas; encouraging students to discover new concepts and the propositions that connect them; allowing students to more clearly communicate ideas, thoughts and information; helping students integrate new concepts with older concepts; enabling students to gain enhanced knowledge of any topic and evaluate the information.  | 0.69        |
| Graded homework      | By graded, we mean that something is done with it i.e. students receive feedback on it (rather than a score or a 'grade' being assigned to it). There is evidence to suggest that feedback-only marking is a more powerful approach than use of scores and grades.   | 0.64        |
| Time on task         | Ensuring that students are given adequate time on a particular learning activity. This includes time allocated by the teacher and time engaged by the student.   | 0.62        |
| Direct instruction   | Setting out the learning intentions and success criteria for the lesson; reviewing prior learning; present new content; use of formative assessment (e.g. via questioning) to check understanding; allowing time for independent practice, with opportunities for teacher support and feedback; review learning from the lesson, including how well it was learned and next steps.   | 0.60        |
| Spaced practice      | Frequency of different learning opportunities; three to four exposures to learning over several days. Spacing the practice of skills or applying knowledge over a long period of time.   | 0.60        |
| Teaching strategies  | Using a variety of different strategies to teach something; coming at the learning from different angles; adjusting teaching in response to what appears to be working or not.   | 0.60        |
| Study skills         | Develop task-related skills (note taking, summarising); self-management learning skills (planning, monitoring, tactics, strategies); and non-cognitive features of learning like motivation.   | 0.60        |
| Peer tutoring        | Students teaching each other (peer-explaining, peer-checking, peer-assessing); students move to being teachers of themselves.  | 0.55        |

|                               |   |      |
|-------------------------------|---|------|
| Classroom cohesion            | Positive classroom climate; the sense that the teacher and the students are working toward positive learning gains together.  | 0.53 |
| Scaffolding -worked examples  | A process in which teachers model or demonstrate how to solve a problem, and then step back, offering support as needed.  | 0.53 |
| Meta-cognitive strategies     | Thinking about thinking; plan how to approach a given learning task; evaluate progress; monitor comprehension. Self-questioning is an example.  | 0.53 |
| Goal setting                  | Students being given challenging yet achievable learning goals; teachers set challenging targets, rather than “do your best”.   | 0.52 |
| Frequency of testing          | Testing by itself is not as effective as remediation / feedback where the test is used to find what the student needs to improve and they then do corrective work; should provide feedback to teacher to be really effective.           | 0.52 |
| Teacher-student relationships | Teachers facilitate student development by demonstrating that they care for the learning of each as a person.   | 0.52 |
| Classroom management          | Ensuring an environment which is conducive to learning, including in relation to how the classroom is set up and resources are allocated.   | 0.52 |
| Questioning                   | Most effective questions are high order “why, how and which is best” questions that cause students to really think; they need to be given time and do better in pairs than alone; important to analyse the questions students ask, too. | 0.48 |

John Hattie, *Visible Learning: The Sequel* 2023

## Appendix 3: Recommended reads





## Appendix 3 (continued): Recommended reads

