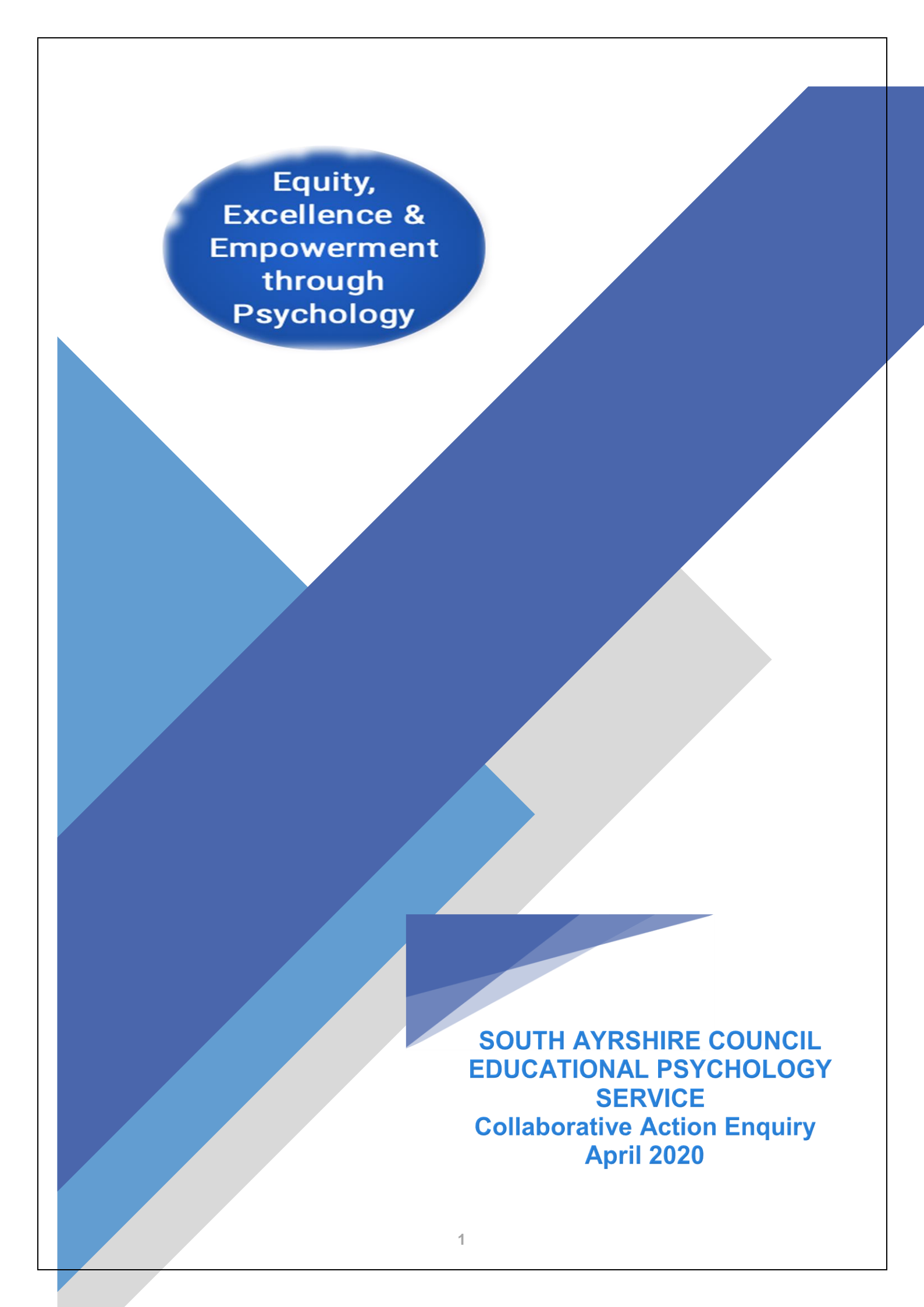


**Equity,  
Excellence &  
Empowerment  
through  
Psychology**



**SOUTH AYRSHIRE COUNCIL  
EDUCATIONAL PSYCHOLOGY  
SERVICE  
Collaborative Action Enquiry  
April 2020**

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# PART 1

Why?



## What is Practitioner Enquiry?

As an educator, have you considered any of the following?

- *using a new approach in your classroom?*
- *involving pupils in designing a lesson and setting success criteria?*
- *collaborating regarding daily learning intentions?*
- *looking for an alternative approach for an area you'd like to progress?*
- *building upon your own teaching strengths?*



Individuals undertaking this type of reflection are showing skills in **practitioner enquiry**. Formalising this process by using a framework (e.g. the eclectic model for improvement) ensures impact data is at the forefront and changes are captured.

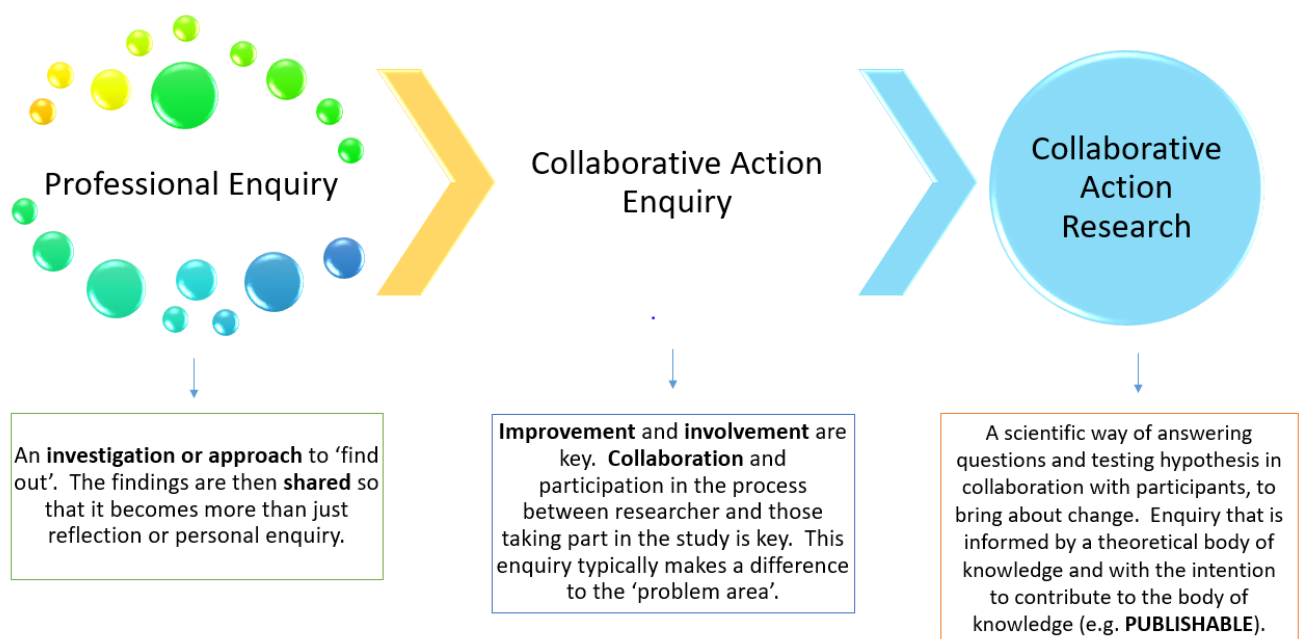
Practitioner enquiry includes the following:

- Identify an area to be investigated. Consider the research base and available resources when scoping out probable reasons and solutions.
- Use the evidence base to identify and implement a strategy to progress the situation.
- Triangulate and analyse your impact data to evaluate your development.



## South Ayrshire Model

Practitioner enquiry is a common research methodology used in education to meet National Priorities (Darling-Hammond et al., 2011, p. 344) and support the whole-establishment change process. In South Ayrshire the educational psychology service have detailed a progression model of practitioner enquiry that takes into account enquiry at differing levels:



*Figure 1: Practitioner Enquiry progression model exhibited within South Ayrshire authority with education partners.*

**Professional enquiry** is a 'finding out' or an investigation with an approach that can be explained or defended. The findings can then be shared so it becomes more than reflection or personal enquiry. It is usually undertaken within the practitioner's own practice, with the outcome being context-specific. Effective professional enquiry requires practitioners to:

- ~ *Be confident and open to challenge,*
- ~ *Have risk taking attitudes,*
- ~ *Question their own understandings, assumptions, beliefs and practices,*

- *Engage with theory, literature and research,*

Enquiry tends to be least successful when simply used to test 'best practices'. Enquiries that do not probe the deeper questions about the nature and purpose of the investigation run the risk of becoming a 'tick box' exercise. When carried out effectively, practitioner enquiry can:

- *lead to professional development and changes in pedagogy and curriculum,*
- *enable teachers to collaboratively develop the curriculum and improve the use of research findings,*
- *drive educational change.*

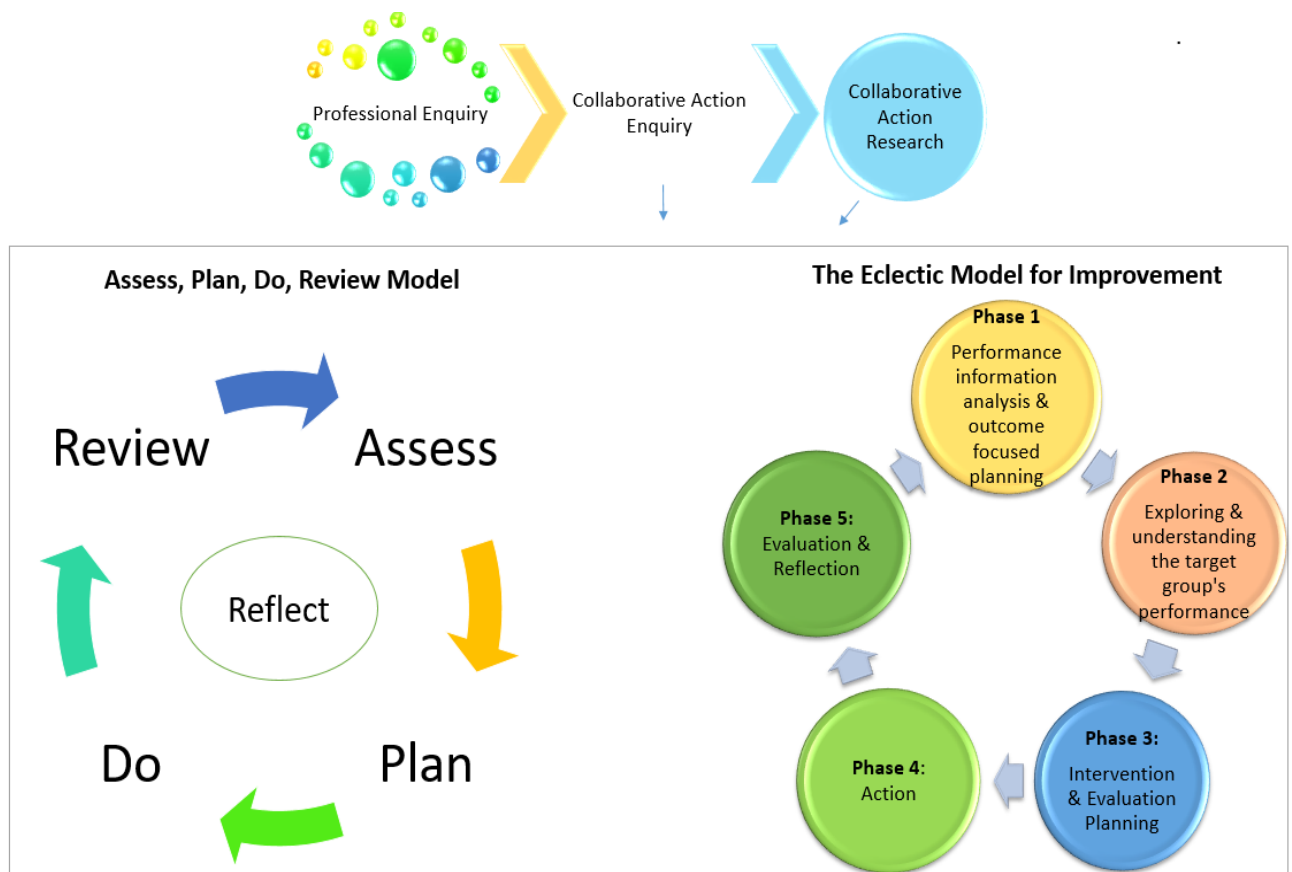
The most effective enquiries ensure self-evaluation and reflection occurs throughout, allowing for adaption as appropriate to project implementation.



**Collaborative action enquiry** involves collaboration and participation between the main 'practitioner researcher' and those taking part in the study. This enquiry typically makes a difference to the 'problem area' i.e. the lives and situations of those involved. Thus both participation and improvement are central. When undertaking Collaborative Action Enquiry development, the South Ayrshire Educational Psychological Service (SAEPS) typically employ a range of models such as *Assess, Plan, Do, Review Model* (Education Scotland, 2016) and the *Eclectic Model for Improvement Framework* (East Renfrewshire, 2017). These can be used for Collaborative Action Enquiry and Collaborative Action Research. The cyclical stages of the framework are captured in figure 2 below. When using this methodology, change is considered a process, not an event (Fullan, 2007).

*“Collaborative action enquiry is a systematic study that combines action and reflection with the intention of improving practice (Ebbutt, 1985)”*

Within Scottish Education we advocate the Social Justice model of inclusion (National Inclusion Framework, 2015), this assumes that everyone has a right to share their opinion and have a voice. This includes those who traditionally could be viewed to have the ‘least power’ namely children or young people. Indeed, with reference to article 12 of the Convention of the Rights of the Child (CRC) - ratified on the 20th of November 1989 by the United Nations General Assembly - a child should, *“have the right to express his or her own views freely on all matters affecting the child, and should be given the opportunity to be heard.”* Collaborative practitioner enquiry ensures that we include children in our change projects – answering key enquiry questions such as ‘why does this work?’, ‘how does it feel for those involved?’ ‘are things better as a result?’.



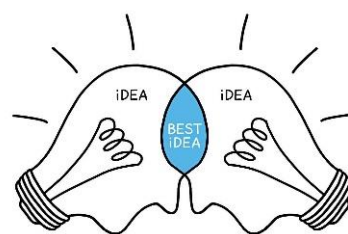
*Figure 3: Both the Assess, Plan, Do, Review and Eclectic Model for Improvement can both be used to undertake Collaborative Action Enquiry and Research.*

**Collaborative Action Research** is participatory practitioner enquiry undertaken for the purposes of improvement and publication. It may involve: (1) investigating existing problems and situations, (2) providing solutions to problems, (3) constructing or creating new procedures or systems, (4) generating new knowledge.

Practitioner enquiry often becomes attainable when education staff see the impact it has with normal teaching and learning practice (Wall, 2018). Schools are evidence rich and teachers use a wide range of evidence within enquiry projects. Collaborative action research has the benefit of connecting academic research to in vivo practice – it allows practitioners to contextualise research findings with real student populations. Publication of such projects can help us add practical examples to the evidence base of what works within the Scottish context. Education Scotland actively promote such publications via websites, such as the National Improvement Hub.

The South Ayrshire progression model of practitioner enquiry ensures that both systemic enquiry and reflection are integral. The Educational Psychology team will often build capacity by upskilling school staff using collaborative action enquiry, enabling schools to become leaders of their own change. Such examples include:

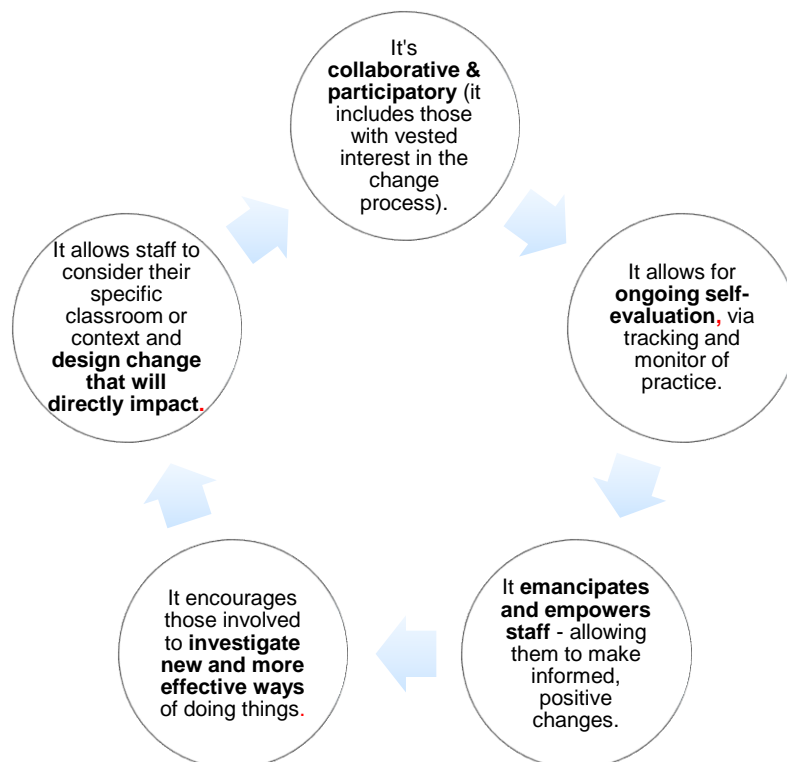
- The Compassionate and Connected Community framework (Education Scotland, 2019) - supporting a consistent method of practitioner enquiry across the authority through collaboration with school staff.
- Supporting the Queen Margaret Academy cluster primary schools to engage in practitioner enquiry in line with their own development plans.





## Why undertake practitioner enquiry?

There may be curriculum recourses that aren't as readily implemented within your establishment context. Or you may have encountered interesting training opportunities with strategies that are perhaps difficult to transport into your everyday practice. Practitioner enquiry can help as it allows staff to make informed judgements of what would work within their particular context, allowing projects to be implemented in an individualised and robust manner. Some key components of practitioner enquiry are as follows:



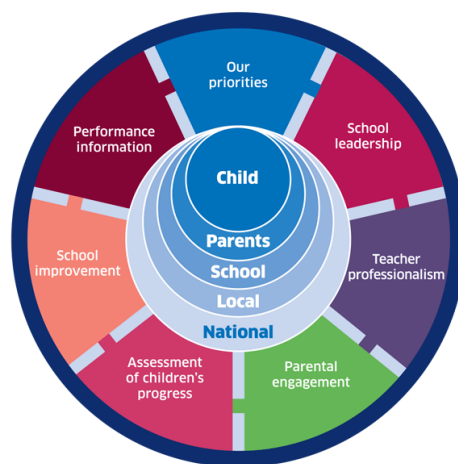
Practitioner enquiry is ever-present in the discourse of Scottish education (Wall, 2018). The General Teaching Council for Scotland (GTCS) (2012), the National Framework for Inclusion (2015) and the National Improvement Framework (2017) all advance practitioner enquiry as an integral aspect of day-to-day teaching practice. The Graduate Teaching Council registration standards for teachers (General Teaching Council Standards for Registration, 2012) & GTCS registration standards (2012) highlight that registered practitioners should know how to:

- ✓ *Access and apply relevant findings from educational research.*

- ✓ *Engage critically in enquiry, research and evaluation individually or collaboratively, and apply this in order to improve teaching and learning.*
- ✓ *Have knowledge and understanding of the importance of research and engagement in professional enquiry.*

The National Inclusion Framework (Education Scotland, 2015) positions that teaching staff should, *“Have knowledge and understanding of the importance of research and engagement in professional enquiry.”*

In the current climate of targeted education budgets, such as the Pupil Equity Fund, educational establishments and local authorities are increasingly being held to account regarding the impact of budget spending. In Scotland, Her Majesty’s Inspectorate Team (HMIe) measures a school’s progress with the aid of the National Improvement Framework indicators (see figure 3 below). Engagement in practitioner enquiry promotes professional development by encouraging engagement with theory, practice and policy (Argyris and Schön, 1974), enabling staff to take an active position regarding eliciting change (Stephenson and Ennion, 2012) and positively impacting national priorities.



*Figure 3: The National Improvement Indicators (Education Scotland, 2017)*

It allows us to consider what is ‘actually going on’ rather than what is ‘perceived to be going on’. Staff who undertake this development have a better understanding of their practice and ways to improve it (McLaughlin et al., 2004). Such critical reflection may be positively transformative to someone’s practice. Practitioner

Enquiry can result in tangible improved outcomes for students and gives staff an informed voice (Beckett 2014; Groundwater-Smith and Kemmis, 2005). It supports staff to become more metacognitive and reflective about their practice – ensuring that we are all strategic learners (Wall and Hall 2016).

*“Full realisation of the potential of Curriculum for Excellence can only be achieved through the professionalism of teachers, working as leaders of the educational process.” (McCormac, 2011).”*

*“The CfE is underpinned by a wider concept of professionalism: “...a teaching profession which sees its members as prime agents of change” (Donaldson 2011, p. 14).”*



## I'm too busy!

Teaching is a multi-tasking profession with competing demands. Advancing the curriculum, integrating modern technology to supplement lessons, linking with parents and carers and supporting the wellbeing of pupils - the remit is long! Professional enquiry should not just be another thing to add to your to-do list. Whilst it may take time to plan and evaluate, it allows staff to make positive changes to ensure best practice – the benefits very much outweigh the costs.

Education Scotland understands the influence and importance of practitioner enquiry. They have integrated the implementation methodology into a number of their national educational initiatives. Such projects include:

~ [The Compassionate and Connected Community \(2018\)](#)

Practitioner enquiry is an integral component of the initial scene setting training, alongside dissemination of the key modules.

~ [Applying Nurture as a Whole School Approach \(2017\)](#)

The challenge questions can be used as practitioner enquiry research questions, encouraging the gathering of impact data related to nurturing approaches within schools.

It is also common for Education Scotland to highlight schools that use practitioner enquiry as part of their observed visit structure i.e. The Lesson Study format (2019). This involves teachers working in small groups to plan lessons that address a shared learning goal for pupils. They then deliver these lessons while their peers observe and refine the lesson plans based on feedback and review (see figure 4 below).

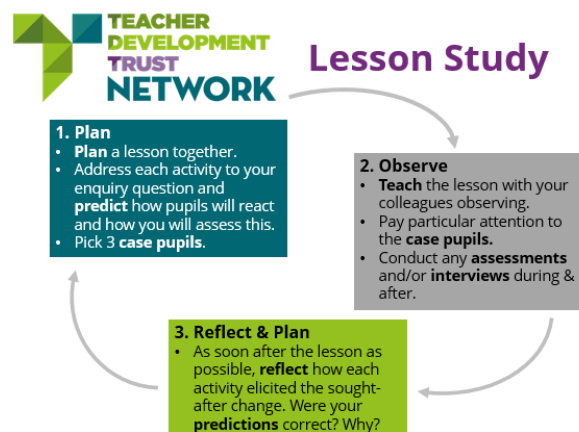
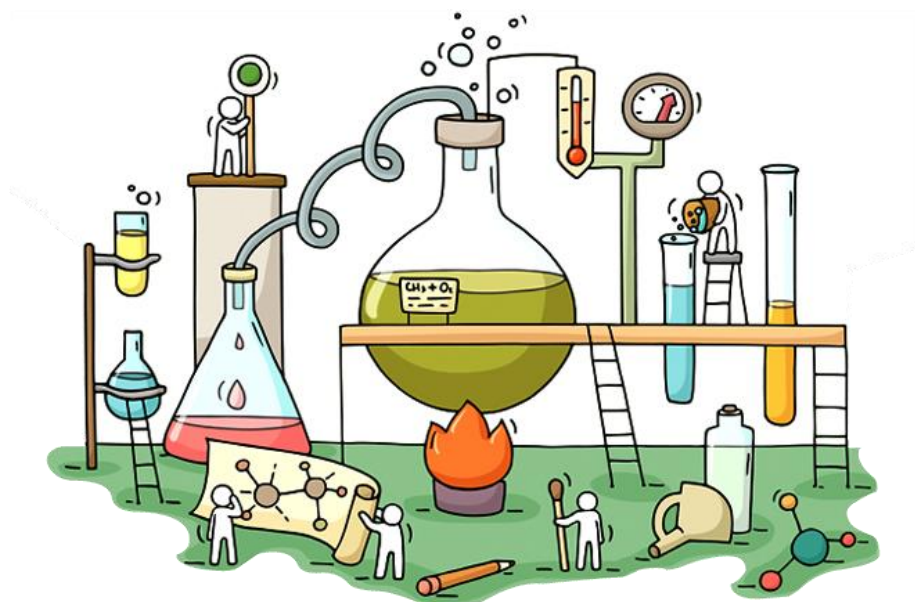


Figure 4: The Lesson Study Format in diagrammatic form.

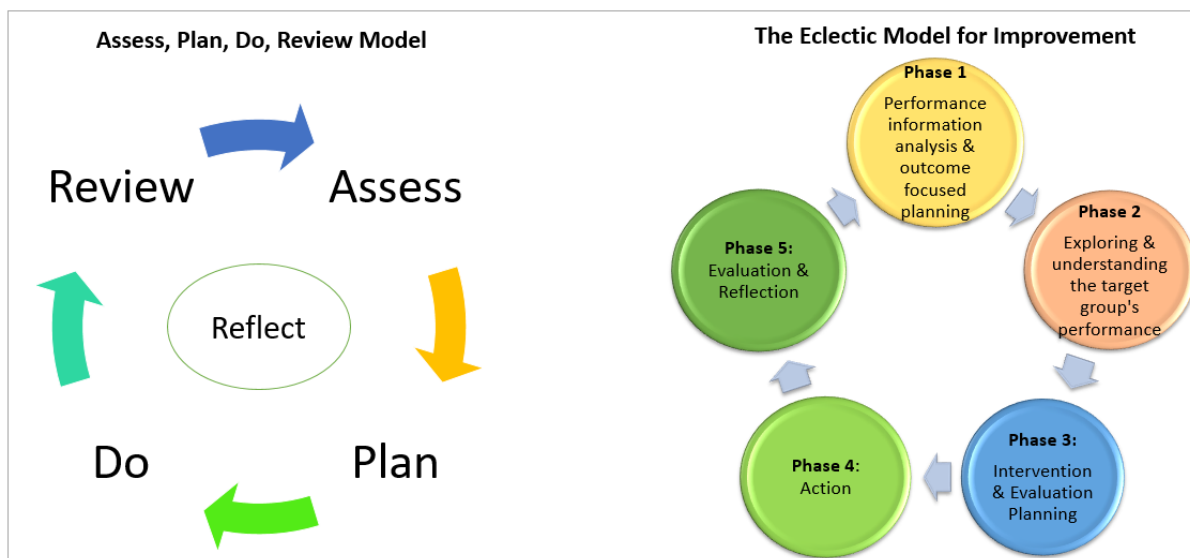
## PART 2:

How?



## Differing Collaborative Action Enquiry Models

As highlighted, the South Ayrshire Educational Psychological Service (SAEPS) typically employ a range of models such as *Assess, Plan, Do, Review Model* (Education Scotland, 2016) and the *Eclectic Model for Improvement Framework* (East Renfrewshire, 2017) when undertaking collaborative action enquiry and research.



**1) Assess, Plan, Do, Review (Education Scotland, 2016)** is a commonly used practitioner enquiry framework that has been promoted by Education Scotland and numerous educational psychological services across the country (e.g. Dundee, Glasgow, Inverclyde). The framework allows practitioners to work together to undertake a needs analysis of 'what's happening and why', jointly negotiate a solution-oriented action plan based on the situation, implement an intervention/strategy to change the situation and review the impact. The steps are as follows:

- ✓ **Assess:** in light of the existing data/research – 'what is currently happening?'
- ✓ **Plan:** plan for carrying out the test or change,
- ✓ **Do:** carry out the test or change,
- ✓ **Review:** review the outcome in light of the main aim/question
- ✓ **Reflect:** undertaken throughout the process - 'what changed and why?'

During the initial step of APDR (i.e. assess), it is good practice for educational practitioners to undertake a robust evaluation of the area they would like to impact. Triangulation of data, highlighted in How Good Is Our School 4 (HGIOS 4) (Education Scotland, 2015), is an effective process allowing data to be gathered from differing sources, increasing the validity of findings (see figure 5 below). This typically involves gaining information that is quantitative and qualitative, alongside observations.

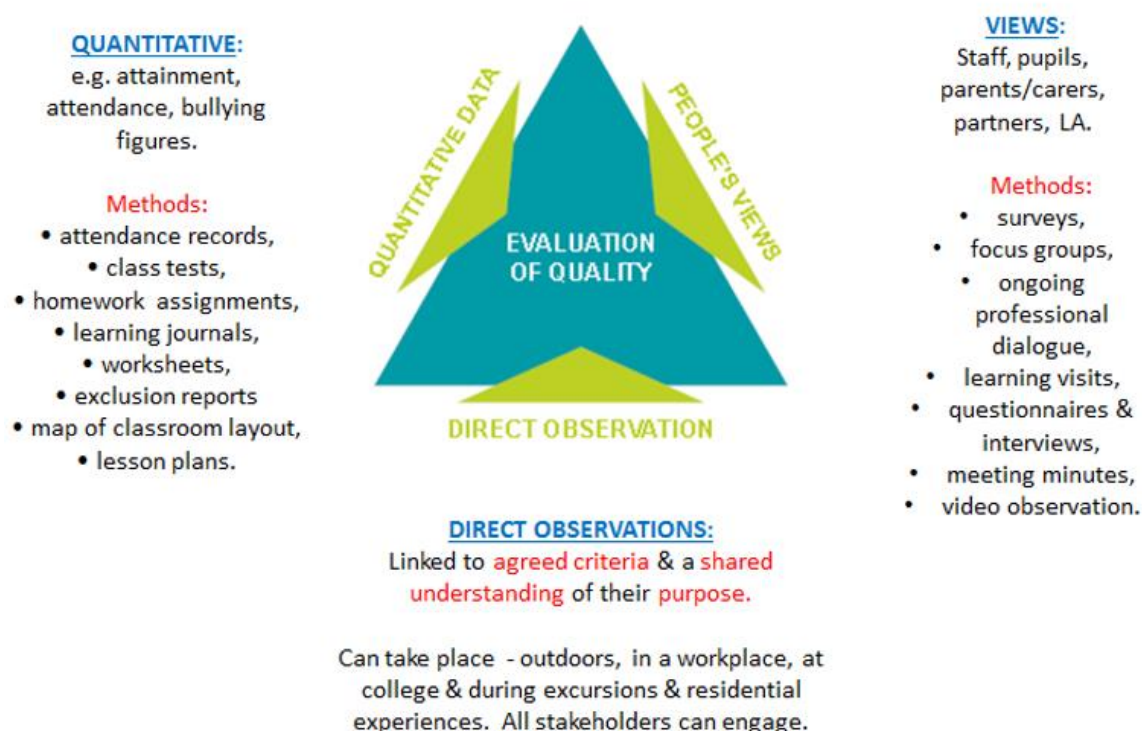


Figure 5: Triangulation of Data adapted from How Good is Our School (2015)

The APDR framework is commonly used alongside Implementation Science to ensure we consider not only the types of programs/strategies being implemented (i.e. 'the what'), but also 'how' they are embedded successfully. Implementation Science (IS) involves using skills and methods to implement research findings and evidence-based programmes in real-world settings – improving the quality and effectiveness of how change is rolled-out and sustained (Eccles & Mittman, 2006 – see table 1 below). Overall this asserts that both impact and process (i.e. the 'how you got there') data are important when developing initiatives. If you gain knowledge

of the 'key ingredients' of how a project is successful within a particular context, then you are better able to both sustain this initiative and transport it into similar contexts readily.

Table 1: Adapted from (Kelly, 2012) - an effective "what" (innovation), should be accompanied by an effective "how" (implementation).

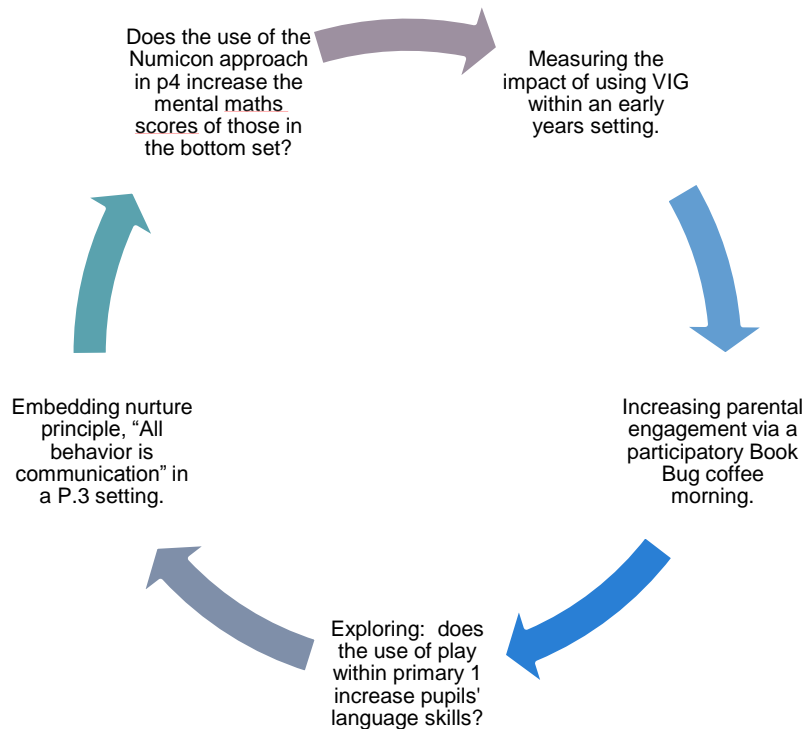
		Implementation: "The How" - Implementation Science	
		Effective	Not Effective
Innovation: "The What" - Evidence Base	Effective	Improved Students Outcomes	Poor Outcomes
	Not Effective	Poor Outcomes	Poor Outcomes

Key implementation aspects, to ensure the sustainability of a project (Dane and Schneider, 1998; Fixsen et al., 2009) include:

- ~ The creation of an *implementation team*,
- ~ Ensuring that *early adopters (enthusiastic staff)* are recruited,
- ~ Employing a *training plus coaching model*,
- ~ *Gauging readiness* of senior management buy-in to change,
- ~ Ensuring that you have *systems* ready to *gather data*,
- ~ *Staying true to the fidelity* and rolling out the programme as intended.

Previous national projects that have undertaken practitioner enquiry using the Assess, Plan, Do, Review model include:





**2) The Eclectic Model of Improvement (EMI: East Renfrewshire, 2017)** promotes collaboration across classrooms and schools to tackle educational inequality. Data and collaborative enquiry are used to innovate, test and refine new approaches to tackle the attainment gap, which should be viewed within the broader context of attendance, attainment, exclusion/inclusion, engagement and participation. The model has a solution-focused approach, with projects locally owned and led by school leaders working in partnership and collaboration with like-minded professionals. Research evidence indicates that well supported partnerships can lead to significant and sustained improvement, including raised attainment. Staff are encouraged to learn from each other, experiment with their practice and monitor and evaluate change.



Core Principles of the EMI, collaborative action model include:

- *Partnership working with a focus on exploring specific issues relating to educational inequity.*

- ~ *The creation of leadership opportunities and professional learning of staff at all levels.*
- ~ *A commitment to reciprocity and mutual benefit to all involved.*
- ~ *The development of arrangements to support long-term collaboration and new approaches to capacity building.*
- ~ *Explicit links to strategic improvement planning in schools.*

The eclectic model for improvement can be summarised below and in figures 5 and 6:

- ~ **Phase One:** Performance information analysis and outcome focused planning
- ~ **Phase Two:** Exploring and understanding the target group's performance
- ~ **Phase Three:** Intervention and Evaluation Planning
- ~ **Phase Four:** Implement Intervention
- ~ **Phase Five:** Evaluation and Reflection

### Step 1: Analyse Pupil performance information

- Analyse pupil performance information & identify a small group (4-6 people) of vulnerable learners to target in order to improve outcomes
  - *What's your target group? How many pupils? What's the rationale for selection?*

### Step 2: Identify SMART outcomes for target group

- Following intervention, what improvements would you expect to see?
  - It might be helpful to continuously review these outcomes.

### Step 1: Identifying evidence-based interventions through research/professional enquiry

- Through professional enquiry and reviewing the research literature, explore evidence-based interventions – which one(s) could you implement to address identified pressures of target group?
- How could you build on the identified strengths of target group?
- TIP: look at groups with similar pressures who're performing well.

### Step 2: Action Planning

- What is/are your research question(s)? (2 or 3 at most)
  - What are you going to do? Who is going to be involved?
  - When are you going to do it? For how long?
  - How will it be evaluated in the short and long term?
- Do you intend to have a control/comparison group?
  - I.e. a group of pupils with similar needs who do not receive the intervention but take part in the pre and post evaluations for comparison purposes.
- \*Helpful tips\*
  - A research question is a clear, focused, concise and arguable question around which to centre your research.

### Step 1: Explore strengths of and pressures on your target group

- What are factors that impact (pos./neg.) on this group of learners?
  - School learning environment?
  - Parental factors?
- What are the strengths/positive factors?
- What are the pressures/negative factors?

### Step 2: Evaluating the significance of factors identified.

- Consider ways in which you can test the significance of factors outlined (e.g. school information, evidence base)
- Confirmed strengths/positive factors
- Confirmed pressures/negative factors

### Step 1: Measuring Impact and Outcomes

- Following evaluation of the intervention:
  - What impact has the intervention had?
  - Have your SMART outcomes been achieved?
    - Describe

### Step 2: Critical Reflection

- What have you learned?
- What went well?
- What didn't work so well?
- Is there anything that could have been done better?

### Step 3: Planning for Improvement

- What are you going to do now?*

Figure 5: Brief summary of the Electric Model of School Improvement and its key stages.

## PART 3

### Collaborative Action Enquiry Model Examples

1. APDR Template with practitioner prompts.
2. APDR Poster Example: Primary Visualisation Project
3. APDR Poster Example: Child X's social/emotional support?
4. Example for the Eclectic Model for Improvement



#### Example 1: APDR Template with Prompts

#### Collaborative Action Enquiry: South Ayrshire Authority



## Assess, Plan, Do, Review Form

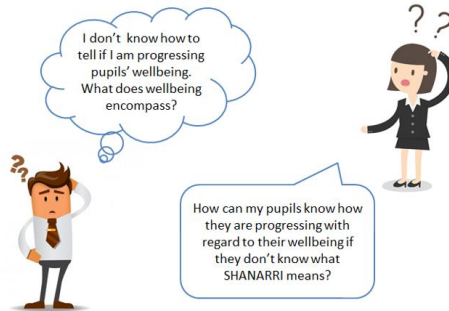
Title of Project	
Name of Establishment	
Key Practitioner Contact	

<b>AIM</b>	<b>Start Date</b>	<b>Review Date</b>
------------	-------------------	--------------------

What are the main questions(s)? What are we trying to achieve?

**Aim:**

Begin with an enquiry....



**Main Questions(s):**

What evidence do we already have and what does it tell us?

Use Triangulation of Evidence Approach



**A  
S  
S  
E  
S  
S**

What else do we need to find out?

What is the intended outcome? What evidence will we gather in order to measure impact?

**P  
L  
A  
N**

How do we plan to implement the change: who, what, when, where, how?

Solution Orientated Framework useful to keep track of project roll-out.

Who	What	When	Where	How

What happened during implementation – reflections on what went well, any changes made?

Good to keep a reflective diary throughout. This will give key

information regarding the process of roll-out allowing evaluation of implementation to take place and ensure project sustainability.

Both pupils and staff reported that they were proud of the SHANARRI characters created – differing primary staff commented positively on them when entering visiting the school.

Pupils started to articulate means to progress their own wellbeing when creating the characters e.g. "I might join the school netball club to be more active".

DO

### Reflective Diary - 2 Formats

Whats going on for our learners ①  
How do we know ②  
Why does this matter ③

25<sup>th</sup> of October 2016

① pupils are unsure of the language of wellbeing  
② pupils given out SHANARRI qnaire to complete, however average class score of indicators correct: 2  
③ pupils should be able to use the language of wellbeing to contribute to their wellbeing plans/assessments.

27<sup>th</sup> of October 2016

① pupils decide they want to create characters to help them remember SHANARRI,  
② pupils asked in focus groups which would be best to help them remember SHANARRI,  
③ pupils have picked the invention themselves - they have taken ownership of it.

31<sup>st</sup> of October 2016

① Each primary stage has opted to create their own SHANARRI character to share with the school,  
② action research school link has liaised with school SMT regarding implementation plan  
③ whole school, shared uptake - project sustainable

25<sup>th</sup> of October 2016

Pupils unsure of wellbeing language - SHANARRI school questionnaire shows that pupils can only name an average two indicators. Pupils need language to contribute to wellbeing plan

27<sup>th</sup> of October 2016

Pupils decide in focus groups that they want to create their own school SHANARRI mascots. Pupils have opted for this creative SHANARRI id - they have taken ownership of the project.

31<sup>st</sup> of October 2016

Important to link with SMT when negotiating whole-school uptake. Plan created with SMT for each primary stage to create their own character to then be shared whole-school at assembly. Whole school uptake = more sustainable project.

REVIEW

What does the evidence tell us about the impact of this change?

- ✓ What worked and why?
- ✓ What didn't work and why?
- ✓ How will you do things differently?
- ✓ Did your forms of evidence let you see what you wanted to see?
- ✓ What have you learned yourself?
- ✓ In what ways have your learners changed?

Also good to consider:

- ✓ How will you share your results?
  - ✓ Could they be useful in your school/community/nationally?
- Present your findings to others - you can give a talk, do presentation at a conference, publish a paper or participate in on-line teacher forums.

## Collaborative Action Enquiry Development: Assess, Plan, Do, Review Framework

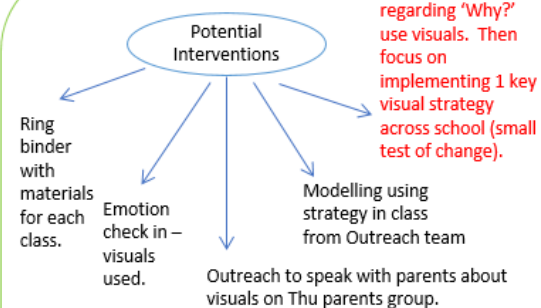
### Example 2 – A.P.D.R. Measuring the Effective Implementation of Whole Primary Visualisation Project

- What does the evidence tell us about the impact of this change?
- What do we need to do next (ongoing APDR cycle)?

#### REVIEW

- Pre/post photos of visualisations used in the school.
- Process data regarding implementation (reflective diary from DHT regarding how staff managed change throughout and any issues that mean project required adaptation.
- Counts regarding how many staff using visual strategies such as 5 point scale and emotion check-in with visuals. Counts taken at 3 points throughout project.
- Teacher knowledge and understanding increase over time regarding using visuals.

#### DO



The end goal would be to create a school best practice booklet with examples of effective visualisations across the primary and statements from staff regarding why/how they work. Also succinct information regarding how to implement visual timetables etc.

- What happened during implementation – reflections on what well,
- any changes made?

### AIM: EFFECTIVE IMPLEMENTATION OF WHOLE PRIMARY SCHOOL VISUALISATION PROJECT



#### DHT Reflections:

- Mixed use of visuals in the school prior to strategies implemented. The teacher understanding session increased their knowledge of how and why we use visuals, this then gave them more confidence to implement.
- Really beneficial for school SMT to visit another primary to compare visualisation ideas – we then decided to team up to review each others development.

- What evidence do we already have?
  - What does it tell us?
  - What else do we need to find out?

#### Quantitative

#### ASSESS

#### Views

- How many staff using 5 point scale, now and then etc.
  - Counts of children with asn - autism, Dyslexia, ADHD etc.
  - Teachers (Focus G.) - how & why we gather visuals .
  - Pupils (Focus G.) children to be detectives.
  - Meeting with parents – their views.
- Observation**
- Outreach Service class observation – best practice ASD classroom.
  - Linking with other schools regarding visualisation examples within their schools – observation.

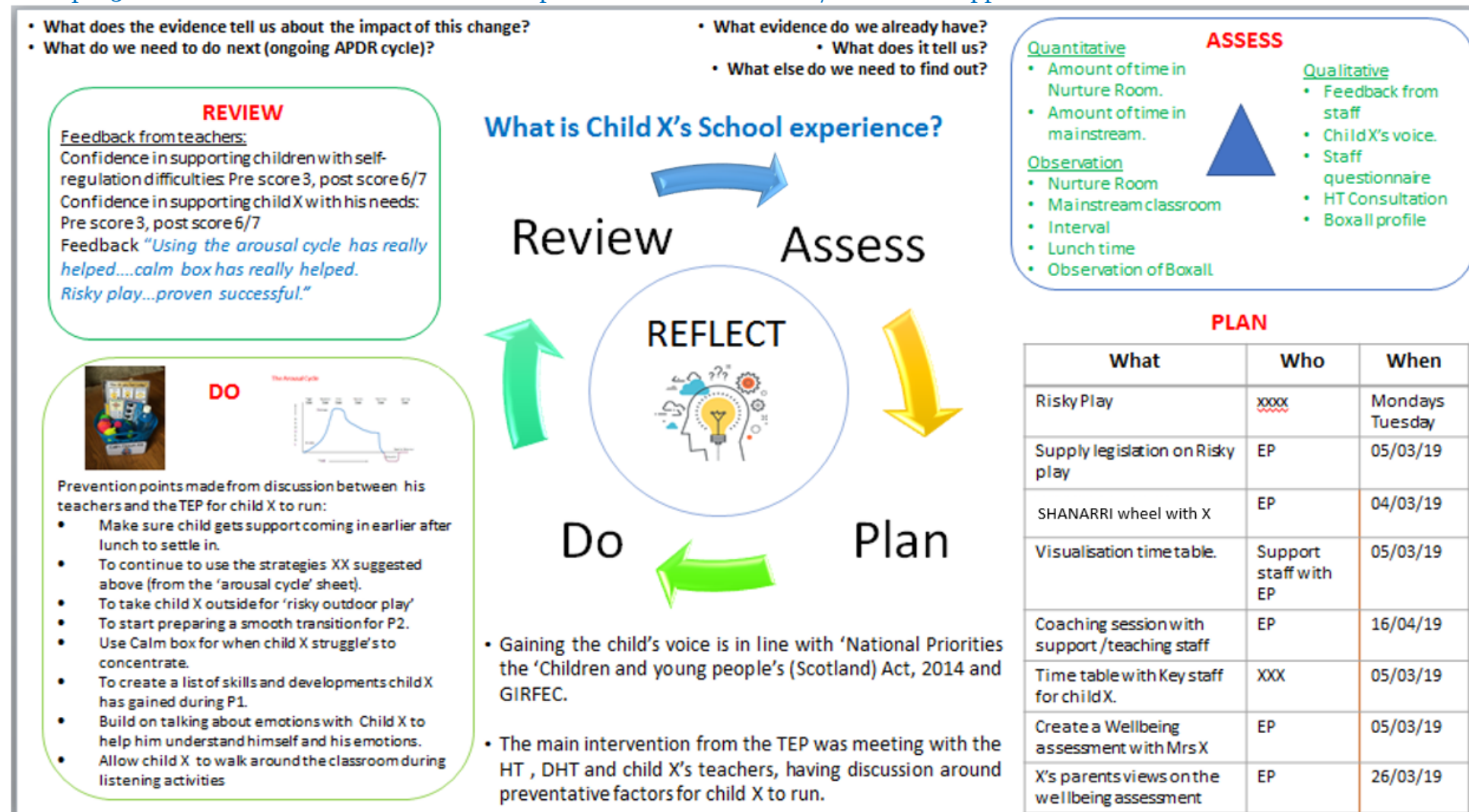
#### PLAN

What	Who	When
Classroom Observation using <u>asd</u> profile & photos of visuals in school (good & tricky).	Outreach team & DHT	Jan/Feb
Teachers (understanding of using visuals) & pupils focus groups (what visuals helpful).	Coaching Officer and Ed. <u>Psy.</u>	Jan/Feb
Visualisation in the nurture room? Examples of good practice (photos, statements from nurture teacher?)	Outreach team & DHT (photos)	Jan/Feb

- What is the intended outcome?
- What evidence will we gather in order to measure impact?
  - How do we plan to implement this change? Who, when, where, how, impact data gathered.

## Collaborative Action Enquiry Development: Assess, Plan, Do, Review Framework

### Example 3 – A.P.D.R. What is Child X’s school experience in terms of social/emotional support?



- Gaining the child’s voice is in line with ‘National Priorities the ‘Children and young people’s (Scotland) Act, 2014 and GIRFEC.
- The main intervention from the TEP was meeting with the HT , DHT and child X’s teachers, having discussion around preventative factors for child X to run.



## Example 4: Example of the Eclectic Model for Improvement

The following provides a template to support practitioners using The Eclectic Model of Improvement— phase 1-5 included.

### Phase One: Performance Information Analysis and Outcome Focused Planning

#### Step One: Analyse pupil performance information

Through analysis of pupil performance information identify a *small* group (4-6) of **vulnerable** learners to target in order to improve outcomes (attendance, attainment, exclusion/inclusion, engagement, participation).

**Target Group:**

Pupil A, B, C, & D

**Number of Pupils:**

4

**Detail the rationale for selection (SIMD, gender, LAC, ethnicity, lowest performing 20%):**  
2 male, 2 female, off track in CfE levels, mixed SIMD profiles (2 pupils in SIMD 1 and 2).

#### Step Two: Identify SMART outcomes for the target group

Following intervention, what improvements would you expect to see? *It might be helpful to review these outcomes following completion of phase 2.*

**Expected SMART outcomes (attendance, attainment, exclusion/inclusion, engagement, participation):**

Expected increased engagement, participation, and potentially increased attainment.

Hope for increased attention.

Improvements in working memory/executive function.

Potentially increased fine motor skills (specific to subject of practitioner).

## Phase Two: Exploring and Understanding the Target Group's Performance

### Step One: Explore the strengths of and pressures on your target group

What are the factors that impact (positively/negatively) on this identified group of learners? You may want to consider the following (please note these are examples and not an exhaustive list).

- School learning environment – e.g. expectations of pupils, staff/pupil relationships, peer relations, quality and deployment of teaching and support staff, pedagogy, parental engagement
- Parental factors – e.g. engagement with pupils learning, relationships with school staff, value for education, parental educational experiences, parental physical, mental and cognitive health, parenting skills
- Pupil factors – e.g. SHANARRI, Aspirations for future, motivation for learning, pupils physical, emotional/mental and cognitive health, pupil involvement in their learning

#### Strengths/positive factors:

Positive staff relationships, small supportive school environment, pupils are safe, healthy (including strong existing physical health), included, forward-thinking pedagogy etc.

#### Pressures/negative factors:

Pupils struggle with attention, frequent forgetting, parental disengagement, low motivation, potential poor mental health etc.

### Step Two: Evaluating the significance of the factors identified

Consider ways in which you can test (confirm/disprove) the significance of the factors outlined (e.g. existing school information, research evidence, assessment, professional enquiry, questionnaires, focus groups).

#### Confirmed strengths/positive factors:

Use a validated assessment to measure inclusivity

Conduct focus groups to verify supportive school environment - confirmed

Interview pupils about SHANARRI indicators – confirm safe, healthy

Strong physical health based on participation and attainment in P.E.

#### Confirmed pressures/negative factors:

Scores on SCWBS indicate risk of poor wellbeing

Scores on working memory tests indicate poor WM

TEA-Ch scores confirm difficulties with attention

Etc.

#### Helpful Tip

- Appendix A may be helpful in recording the above information

## Phase Three: Intervention and Evaluation Planning

### Step One: Identifying evidenced based interventions through research/professional enquiry

Through professional enquiry and reviewing the research literature, explore relevant evidence based interventions?

Explore exercise-based interventions such as scaffolding, BMT, memory techniques, working memory programmes etc.

What evidence based interventions could you implement to address the identified pressures of the target group?

BMT – improves executive function, which can support working memory & attention

Find a way to include family in this physical intervention, to promote parental engagement & holistic improvements?

What actions could you take to build on the identified strengths of the target group?

Carry out interventions in P.E. class, positive relationships with P.E. teacher and strong attainment/motivation in this area, continue to encourage feeling of inclusion.

Are there areas where the evidence base for improvement is weak?

Less evidence with early/middle primary?

#### Helpful tips:

- multifaceted interventions tend to be the most successful (i.e. they target child, family and school/class factors)
- consider other groups that are performing well despite similar 'risk factors' and how can you learn from their success

### Step Two: Action Planning

Research question/s (no more than 2 or 3):

How does BMT as a small-group intervention impact on working memory?

What are you going to do?

BMT Intervention

What are the timescales - When are you going to do it? How long are you going to do it for?

For 10 weeks, 2 x 30 minute sessions a week.

Who is going to be involved?

Staff member (P.E. specialist), 4 pupils in intervention group, 4 pupils in matched comparison group

How will the intervention be evaluated in the short and long term?

Using the word series and word sentences components of the Cognitive Assessment System

Conduct pupil interviews pre and post to monitor potential attitude changes

Do you intend to have a control/comparison group (i.e. a group of pupils who have similar needs who do not receive the intervention but take part in the pre and post evaluation for comparison purposes)?

Yes – 4 pupils in matched control group

#### Helpful tips/reflective questions:

- A research question is a clear, focused, concise and arguable question around which to centre your research.
- What are the resource implications?
- Do you need to plan CLPL?
- What might get in the way of the intervention being successful? If possible, how are you going to avoid this?

- Do you need to plan time for pre and post information/data gathering and analysis?
- Appendix 2 may be helpful to plan the actions required to implement your intervention

### Phase Four: Action (Implement intervention)

### Phase Five: Evaluation and Reflection

#### Step One: Measuring impact and outcomes

Following evaluation of the intervention (as planned in phase 3):

**What impact has the intervention had?**

Pupils continue to positively engage with P.E.

Soft data indicates motivation for learning extended beyond P.E.

Improvements in fine motor skills

**Have the SMART outcomes been achieved? Please describe.**

Significant improvements in attainment not yet seen, small improvements in working memory demonstrated.

Differences between intervention and control groups?

#### Step Two: Critical Reflection

**What have you learned?**

Importance of focusing on strengths

Key to ensure that suspected pressures are in fact causing difficulties in attainment/participation etc.

**What went well?**

Pupils engaged well with intervention, it was enjoyable, seemed to positively affect working memory

**What didn't work so well?**

There were issues with attendance and staffing

**Is there anything that could have been done better?**

In future, evaluate at all stages of the process to ensure effectiveness & to ensure the intervention being delivered to correct target group

Some fidelity issues due to needing to provide cover – ensure protected time

#### Step Three: Planning for Improvement

**What are you going to do now?**

Embed BMT within P.E. curriculum with the aim of improving working memory at a whole-school level

Continue to engage with research so as to be aware of other potentially impactful interventions

Share increased understanding about working memory with fellow practitioners

**Appendix A: Phase Two: Exploring and Understanding the Target Groups Performance.**

Factor impacting on performance	Is the factor at the level of the school/ class, parent or pupil	Is the factor a strength/positive or pressure/negative factor	What will you do to test the significance of the factor?	Tick if factor is confirmed
Motivation for learning	Pupil	Pressure	Pupil focus group Parental questionnaire	✓
Pupils feel safe	Class	Strength	SHANARRI webs	
Positive/inclusive school environment	School	Strength	Pupil focus groups Specific assessment (e.g. from GL pack)	
Attention	Pupil	Pressure	TEA-Ch assessment Cognitive assessment system	
Memory	Pupil	Pressure	Working memory tests	
Parental engagement	Pupil	Pressure	Interviews? Parental engagement questionnaire	
Poor mental health	Pupil	Pressure	Strengths & Difficulties questionnaire Stirling Children's Wellbeing Scale	
Etc.				

**Phase Three: Intervention and Evaluation Planning**

**Action Plan**

Research question/s How does BMT as a small-group intervention impact on working memory?				
List the actions/tasks needed to implement the intervention and evaluation	By Whom	When	Where	Notes/Comments
Pre-intervention testing	Staff member	ASAP	Classroom	Need to collect pre-intervention data from intervention and control groups BEFORE starting.
Self-reflection	Staff member	Throughout intervention	Classroom	Engage in critical reflection throughout the process – is the intervention being delivered with high fidelity, how is participation etc.
Post-intervention testing	Staff member	At conclusion of intervention	Classroom	Administer the same assessments given pre-intervention to all pupils.
Possibly – follow-up testing	Staff member	X months after conclusion	Classroom	To measure if the effects of the intervention are maintained, collect data again after a period of time has passed.
Etc.				

## **Appendices: Further Reading (please click on hyperlinks below)**

### **Legislation/Policy**

[Education Scotland Act 2016](#)

[The National Improvement Framework 2016](#)

[How Good is our School 4 2015](#)

### **Research**

[Education Scotland Improvement Hub](#)

[Education Endowment Foundation \(school age\);](#)

[Education Endowment Foundation \(early learning\);](#)

[Scottish version of the Education Endowment Foundation's Learning and Teaching Toolkit](#)

[LGiU Scotland](#)

[The Sutton Trust](#)

[Interventions for Equity](#)

[Interventions for Literacy](#)

[Review of Family Learning](#)

### **Improvement Methodology**

[Assess, Plan, Do, Review](#)

[Lesson Study](#)

[Collaborative Action Research](#)

[Instructional Rounds](#)