### WHAT HAVE CLUSTERS WORKED ON/ACHIEVED?

Please note: a full list is available in PSTT Cluster Programme Study appendices 1 and 2, or on the PSTT website.

#### **PSTT linked initiatives**

- a. Use of PSTT resources e.g. Titanic, Chain Reaction, Playground Science, Science Fun at Home
- b. Involvement in College or other projects e.g. Flying into Physics, Leading Research Learning Communities

#### Professional and curriculum development

e.g. sharing and disseminating ideas, auditing and moderation, subject leader role, best practice, progression and curriculum design

#### **Cluster generated projects**

e.g. Playful Approach, 10 Key Words, outdoor learning, science fairs, Mars Rover Challenge

#### Working beyond the Cluster and providing outreach

a. In the locality e.g. involving local universities, local businesses, other schools in the area, Local Authorities
 b. Wider involvement e.g. Great Science Share for Schools, CLEAPPS, ASE, links with associated MATs, STEM ambassadors

#### **Professional achievements**

e.g. Forest school, PSQM, Royal Society Grants, BP Enthuse Award, Global Learning, PSTA

### HOW DO CLUSTERS SPEND THEIR FUNDING?

#### Part A:

- Meetings supporting or subsidising the supply costs for a whole day or half day (most popular)
- Sub-groups or paired work on a project that then contributes to the Cluster
- Visiting one another's schools and working on or supporting an initiative
- Identified needs for individuals e.g. meeting with the coordinator or mentor or to support a new member/someone new to SSL
- CPD on behalf of the group or develop/prepare CPD for the Cluster (or for outreach)

#### Part B:

- Resource needs identified from Cluster and school audits
- Targeted resources to support developments of the Cluster
- Targeted resources to base projects upon
- Shared resources either a) centrally-held expensive ones to share or b) themed boxes created by the group to share between schools
- Designated funds to support individuals to carry out a specific responsibility on behalf of the Cluster, such as organising a group event
- Buying in or subsidising the cost of a CPD provider for a specific need or supporting an aim
- Conference or course costs for a teacher sent on behalf of the group

#### Coordinator's Allowance:

- Organising, managing and running the Cluster
- Meeting individual SSLs from the group for a variety of purposes
- Visiting a school in the Cluster or joining a headteachers' meeting

Coordinator's allowance may be used for a specific whole day, half day or be an accumulation of shorter times.

## CHALLENGES AND EXAMPLES OF HOW CLUSTERS HAVE OVERCOME THEM

Changes in circumstances		Although not prevalent, major changes that are out of the group's control or come out of the blue do occur. Potentially, they can have a significant impact.			
Change A:	One or more schools may be in a Federation or MAT*, or join one midway through the programme and, in doing so, may have changing priorities that are out of the SSL's or school's control.				
Change B:	Similarly, significant changes in school development plans in response to circumstances such as OFSTED inspections have occurred in individual schools or in several schools in the same Cluster.				
Change C:	Specific circumstances can significantly affect the ability of a Cluster to continue for a period. These may be experienced by an individual SSL (when a temporary replacement is unavailable), a school or by a Cluster Coordinator. There may be positive reasons, such as maternity leave or changes in roles, or more sadly, bereavement, sickness and school closure.				
General response	<ul> <li>In cases like these, it is best to contact the Cluster Director, talking things through to find suitable solutions or a way forward, together. The Trust's position is to be as supportive and understanding as possible. Examples that have been found include:</li> <li>Through strategic leadership, a Coordinator or Cluster may be in the position to offer support and the group can contribute towards the school's response and subsequent improvement</li> <li>A SSL or the school could take a sabbatical for a set period (then reviewed)</li> <li>The Cluster's medium-term goals could be changed to directly address the need or altered / applied with flexibility and therefore accommodate the need</li> </ul>				
*Please note - the PSTT Cluster Programme contains many schools that are part of Federations and MATs; it is fully inclusive of such organisations and the significant mutual benefits are recognised.					
Change the gro	up ho	ometimes it can feel rather frustrating but it is a feature that Clusters deal with ell and there is much success: "New SSLs have been welcomed: All mentioned ow much they enjoy being part of the group – new members report being keen join because they know how supportive and proactive the group is!"			
Cluster A:	"A change of members may change the relationships in the group but I think that being clear about expectations, allowing all to showcase their expertise and feel that it is a supportive environment to share and grow will help."				
Cluster B:	"Some staff changes, but this has been planned for and heads have been supportive of ensuring new staff are part of the cluster. New staff brought in have worked closely with cluster lead to bring them up to speed."				
Cluster C:	"Turnover of SSLs has been an issue. To address this problem we have spoken to Heads about the importance of keeping the same Science Leader and valuing/supporting the role. This has led to Science Leaders staying in post for longer."				

Developing a shared vision and joint goals		All Clusters, whether new or made up of SSLs who know each other well, need to have a shared vision and joint goals. These may take a little time to develop and will need to be maintained or revisited over the five years. Forming them is often an enjoyable and fulfilling process that pulls the group together, gives it focus and drives it forward.			
Cluster A:	"At first, most of the group didn't know one another. So, I started by focussing on building relationships, sharing ideas, CPD and doing simpler projects. Then, we were in a position to form more solid and ambitious group goals together."				
Cluster B:	"Sometimes there are conflicting priorities of our schools, e.g. when to prioritise science. We gave our project a broad theme and a long run up time so schools could, at their own pace, accommodate it in their planning for the year."				
Cluster C:	"Each subject leader completed a self-awareness questionnaire and identified which areas they needed support with. This helped us to identify that planning scrutiny was a difficulty. The self-assessment tool allowed us to use some of the cluster meeting time for this shared need."				
Top tips	<ul> <li>Build trust and openness</li> <li>Relationships are key</li> <li>Balance leading the group and letting them set the direction</li> <li>Know when to listen</li> <li>Set a mix of short, medium, and long-t goals</li> <li>Create both simple and ambitious goals</li> <li>Create group aims that can be adapted schools</li> </ul>				
		There are all sorts of reasons why some SSLs or schools may find it hard to engage in the Cluster either at the beginning or at some point			

Lack of engagement		hard to engage in the Cluster either at the beginning or at some point during the programme. Occasionally, there may be hesitancy or even a degree of reluctance. Inclusive Clusters that have the right balance of support and expectation are the most successful at engaging members. (Ultimately, making the most of being in a PSTT Cluster is the responsibility of each individual school.)			
Cluster A:	"Three of the schools had attended only one or two meetings. To address this, I reminded them of the funding, which was available for them to attend, moved the start time to allow more time for those travelling a further distance and emailed the head teachers to remind them of the cluster agreement."				
Cluster B:	"I did go and see two headteachers at the beginning of this term, to express concern about their participation. Resulted in one of the heads coming to a meeting herself. She has now appointed a new science leader and the other school is appointing second person to share the role."				
Cluster C:	"School's science lead was unable to join us for year one. Another member of staff attended. The science lead was kept abreast of everything."				
Top tips	<ul> <li>Ensure it's no</li> <li>Create things reasons to tur</li> </ul>	l from the beginning t just another meeting to do back at school and rn up next time butions and ideas are valued	<ul> <li>Set up challenging but not intimidating activities</li> <li>Secure backing from senior management team - it is the school that signs up not just the SSL</li> </ul>		

## STAGES OF THE PSTT CLUSTER PROGRAMME (GROWTH AND DEVELOPMENT)

Application to PSTT Cluster Panel Acceptance preparation and support to set up cluster

Year 1 initiating and establishing the group Year 2-4 developing and maturing Year 4 & 5 transition to independence

Post Programme suistainable and selfrunning

# MOVING FORWARD, YOUR CLUSTER COULD CONSIDER:

- **Expect** change and, when possible, plan for it. Whether it be SSLs, headteachers, circumstances or shared goals, change is a feature common to all clusters. In fact, helping to cope with it is a key strength and there are benefits in working as collaborative, supportive groups.
- **Involve** the headteachers, senior management team and governors as much as possible. It really works.
- **Spend** the money that is available. Schools should be prompt in invoicing the lead school and Clusters should actively seek all opportunities to allocate and spend their funding.
- **Maximise** the Cluster's influence. Whether it be increasing the impact of the group upon your own member schools or extending your influence in the community and locality, successful Clusters are ambitious and work strategically.
- **Create** your own identity. We strive to apply the programme with flexibility. A Coordinator's own style and qualities are valued, and a Cluster's individuality is encouraged.
- **Celebrate** successes. It is always good to share these as widely as possible. Examples include, using schools' or Clusters' own newsletters, local press, school websites and social media.

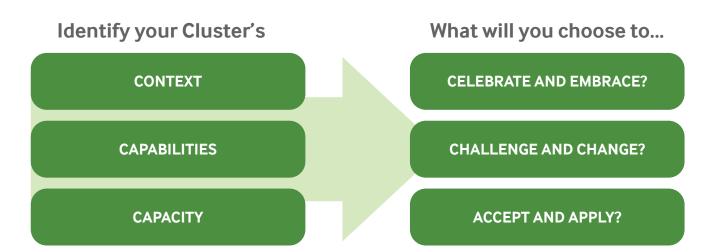
## TRANSITION TO FULL INDEPENDENCE

From the start and throughout the five years, there are benefits for all those involved in Clusters and completion of the Programme is, itself, an achievement. However, Clusters should keep an eye to the future and a life beyond official PSTT support and involvement. There are challenges in moving towards and achieving full independence; Clusters should aim and plan for this transition. (Transition is used in the context of 'moving from one good place to another good place.')

**Example:** 'A succession plan has been agreed and finances for Y5/6 have been put in place' (Cohort 2016). This included meetings with the headteachers and the lead school.

**Example:** '...to take on the running of the cluster with two strong Subject Leaders and a supportive headteacher' (Cohort 2017). **Example:** Some clusters plan to add further schools. In others, schools are given the option and the cluster will proceed with those that choose to commit.

## CONSIDER: WHAT ARE THE CHARACTERISTICS OF YOUR CLUSTER?



### **3 EXAMPLES:**

A Cluster is situated in an area where the children's experiences of science are/ have been consistently limited, and the profile of science is low. The group decide to challenge this by...

- Targeting this characteristic by developing science capital and celebrating science
- Searching for and developing links to people or organisations to enrich experiences and the curriculum
- Encouraging parental involvement and events that involve the whole school community

A Cluster has a high proportion of SSLs new to the role. They may be keen, however, they are not very confident and lack experience.

A Cluster experiences a widespread, particularly heavy school workload.

Rather than press ahead with very ambitious plans, the coordinator and the group could...

- Initially, focus upon developing the role of the SSL for all schools in the Cluster
- Pair up more experienced SSLs with less experienced ones in a buddy system
- Work on parallel projects, some supporting the role of SSL and some using 'easily accessible' good quality resources with CPD alongside them

The decision is made to be realistic and adjust its aims to match its present capacity...

- Accepting that these will need to be simpler
- Sharing the Cluster workload, providing opportunities for distributive leadership and responsibility
- Looking for ways to 'double up' activities e.g. by linking science to literacy or maths

By design, Clusters and the Programme are meant to evolve and be constantly improving. Our intention is to develop and produce an agile model for collaborative groups in an explorative environment based upon our experiences and the data and information we produce together.