Lesson Study in Numeracy

St Blane’s, St Mary’s, Whiteinch and Thornwood Primaries. January –June 2016.

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| **Enquiry Question. A project to identify the gaps in pupil knowledge and skills in numeracy and how effective teaching and learning can bridge these gaps.** |
| **TIMESCALE** | **PROCESS** | **POSSIBLE ACTIVITIES** | **SUCCESS CRITERIA** |
| January – February 2016(St Blane’s Primary School ) | PLANNING **What needs to improve ?** Enquiry Question –( see above) focused and detailed.  | 1. Analyse start of year’s MALT results.
2. Identify gaps in learning in pupil knowledge and skills in mathematics and how effective teaching and learning can meet these gaps.
3. Teacher professional dialogue on current planning process / format in order to enable coherent planning for progression as identified in SIP plan 15/16.
4. Construct enquiry question.
 | MALT results will identify key children and areas for development. Group of children identified and plan in place to meet their needs, including family learning activities. Pupils become more confident and proficient in identified areas, maximising their successes and achievements. All class teachers aware of key areas for development and processes to develop these. Needs in planning identified. Enquiry question developed.  |
| March – April 2016 | TRAINING SKILLS/DEVELOPMENT. **What changes could make a difference?**  | 1. Development of maths plans that plan for progression.
2. Staff training in numeracy. (SEAL training, Developing Numeracy for all staff)
3. Numeracy focus for peer / SMT visits.
4. Numeracy focus for staff meetings.
 | New planning agreed and implemented. Staff attended training from external experts. Teachers facilitated training opportunities, sharing what they have learned with colleagues. Staff focusing on building staff confidence and expertise, sharing effective approaches and trying these out. Staff learning from each other, experiment with their practice and monitor and evaluate change with children. Teachers investigated and researched methodologies. Teachers share resources and methodologies across all stages. We can evidence the impact our professional learning has had on our work and the progress, achievement and attainment on learners over time.  |
|  Previous data collated OCT 2015. January – March 2016 | PRE –TESTING **Where are we now?** How do we know? Measure a baseline/ pre- test.  | 1. MALT results June ’14 and August ’15.
2. Prioritise areas of need within the school P1-7 for direct teaching intervention from the CLOL.
3. Identify pupils who were below or well below average.
4. Review SIMD statistics for each child.
5. Professional dialogue with class teachers to identify needs of these children based on MALT results and classroom assessments.
6. Questionnaires for staff, children and parents.
7. Agree areas for whole school / stage development.
8. Moderation of fractions across learning community.
 | Class teachers analysed data to identify next steps. Classroom practitioners research good practice and working collaboratively learn from others. Teachers are aware of SIMD picture and the overall needs of those in their class, particularly those in bands 1-4. Sharing findings based on assessments. Skills are developing and data used effectively. Findings are analysed and shared with all stakeholders. Staff participate in and give feedback on planning.Teachers meet together to evaluate ideas, success and failures and plan next steps.Teacher observe children and work and reflect with colleagues. Teachers research good practice, share findings and share with others.  Agreed areas will be recorded and included in approaches for developing effective teaching and learning in numeracy. Staff learning from each other, experiment with their practice and monitor and evaluate change with children.  |
| March –June 2016 | **IMPLEMENT AN INTERVENTION/IMPROVEMENT**. Experiment collaborate/ /develop skills  | 1. Target group intervention with Challenge Leader of Learning (CLOL).
2. Whole school/ class intervention.
3. Implement new maths plans.
 | CLOL / teachers plan and deliver lessons, closing the gap to raise attainment and ensure educational outcomes are improving for all learners.Well planned interventions are leading to positive outcomes for children with additional support needs including those within SIMD groups identified. Family learning activities implemented with target group implemented and evaluated impact on pupil learning. Through class and peer visits share findings and lessons learnt. Pupil feedback on their learning.  |
|  May- June 2016 | POST TESTING**Did it make a difference?**How do we know? Look at the data / prove impact. | 1. Questionnaires to children in group.
2. Pupil feedback at plenary sessions / learning conversations.
3. Peer / SMT visits.

Questionnaires to staff / professional discussion on planning. 1. MALT assessments.

Class assessments / CLOL assessments 1. Teacher feedback / sharing activities
2. Parental feedback
 | Post-tests developed and carried out.Pupil feedback / learning conversations at plenary sessions – Amy Applications feedback etc, HOTs plenary templates, evaluation wall. Feedback and professional dialogue at class / peer visits. Surveys and questionnaires carried out – collated and fed back to stakeholders.Data audited and collated.Feedback shared with all stakeholders including parent focus group for family learning.  |
|  April- June 2016 | DATA COLLATION /ANALYSIS **Did it make a difference?**How do we know? Look at the data / prove impact. | 1. Additional training and support.
2. Evidence collated, interpreted and presented.
3. Peer visit feedback.
 | A range of strategies being used in class / observed and shared during peer visits. Staff meeting feedback sessions. Summaries of data findings created.  |
| 5th May 2016 INSET June 23rd 2016 INSET  | SHARING OF FINDINGS**Share the discovery.** Who do we tell / should we scale it up? | 1. Final reports, presentations of findings to others, sharing of resources, guidance packs.
 | Presentation of findings. Opportunities made to share findings. Liaison with Cluster 17 group of CLOLs for next steps in challenge.  |