

## School Improvement Partnership Programme (SIPP): Raising attainment in literacy, numeracy and health & wellbeing

### West Partnership and SIPP

The School Improvement Partnership Programme (SIPP) is now being taken forward by the West Partnership this session, via the Collaborative Learning Network Stream. The West Partnership defines collaboration as “working together to understand and improve pedagogy for agreed purposes, which leads to better outcomes, informed by evidence and critical self-reflection”. The West Partnership aims to create a Collaborative Learning Network for their practitioners working within Early Years Establishments, Primary Schools, Secondary Schools and Special Schools. Consequently, Primary schools from across the West Partnership have been participating in training sessions on research methodology in Tweedie Hall, Linwood. They then formed partnerships with colleagues from eight other local authorities to develop a research question and plan their project. This exciting development in the West Partnership also includes secondary schools, who participated in a separate cohort and undertook training. The ultimate goal is to raise attainment through collaboration and this new venture should help to realise this objective on an even bigger scale. We wish them every success!

### Year 4—2019/20

Year 4 of the School Improvement Partnership Programme for 2019/20 was once again successfully launched in September. This session, only two of the 16 partnerships are with establishments in other local authorities. The partnerships established so far are:

#### Within Authority

Eaglesham Primary / Madras FC  
 St Joseph’s Primary/ Calderwood Lodge Primary  
 Eaglesham Primary / Mearns Primary  
 Hazeldene FC / Cart Mill FC  
 Netherlee Primary / St Thomas’ Primary  
 Glenwood FC / Carlibar Primary/St Mark’s Primary  
 McCready FC / Glen FC  
 Carolside Primary / Cross Arthurlie Primary

### Equity & Excellence Event

Maidenhill Primary played host to the Equity and Excellence event, which also included workshops from both Pupil Equity (PEF) and School Improvement Partnership (SIPP) projects. The event was opened by Mhairi Shaw, Director of Education. Four SIPs from last year were represented:



Maidenhill Primary / Busby Primary  
 Arthurlie FC / Our Lady of the Missions Primary  
 Crookfur Primary / St Clare’s Primary  
 Braidbar Primary / Kirkhill Primary  
 St Cadoc’s Primary / Thornliebank Primary  
 St John’s Primary / Uplawmoor Primary

#### Outside Authority

Isobel Mair / Langlands  
 Giffnock Primary / Kilmacolm Primary

Following an established trend, the majority of the topics explored by the SIPs were generally on literacy, but some also included aspects of health and wellbeing. In total, the research areas covered were broadly: 9 literacy, 5 numeracy and 2 health & wellbeing projects.

Eaglesham / Madras  
 Crookfur/ Neilston  
 Braidbar / Busby / Glenwood  
 St Joseph’s / Our Lady of the Missions  
 The SIPP workshops were well received and a great advert for the programme.

## Review of SIPP 2018 / 2019

The new training format for SIPP consisting of three twilight sessions were generally successful and will continue this session. SIPP participants are expected to attend all three training opportunities in order to ensure they benefit fully from the support and learning offered from the Educational Psychology Service. They also emphasise the key aspect of SIPP, which is collaboration with colleagues. Once again, support for individual SIPs who wish to discuss particular aspects of their project is still available and can be accessed by contacting Margaret Allaway, Education Development Officer for Learning, Teaching and Assessment at:

Margaret.Allaway@eastrenfrewshire.gov.uk.

Evaluations for SIPP 2018/19 were very positive and evidenced that SIPP was valued by participants who recognised the value of collaboration to raise attainment. The main issue raised was time to do work for SIPP. Consequently, schools are encouraged to ensure enough time is set aside for SIPP work.

## Posters

The introduction of Posters last session to summarise visually the SIPP projects was a great success with many excellent posters produced. One example, was from Glenwood FC/ Braidbar Primary /Busby Primary. See below. The posters have been compiled into a booklet and distributed to schools.

**What impact can the SEAL approach have on attainment in numeracy for preschool boys?**

**Introduction**  
Each setting identified some common factors for a possible target group: a small group of boys who appeared to be underachieving in numeracy and maths. It was agreed that this preschool group would be the focus of our research.

Based on our identified group of learners, we discussed a range of desirable outcomes and considered both engagement and attainment. We then reached a consensus and identified a reading writing session and Maths engagement in professional dialogue with colleagues and observing current practice.

As potential interventions, we considered digital technologies, Number Talks, loose parts, numeracy through the arts, reviewing the role of the adult and the SEAL approach which was recently shared by our Maths Champions. Having had weekly, we found there to be a lack of research supporting effective interventions for low-achieving boys in early years settings. The group discussed the merits of each intervention, looking specifically at the appropriateness and feasibility in our early years context. A consensus was reached and it was agreed that we would use the SEAL approach with the intention of raising attainment in numeracy.

The group also considered a variety of tools to gather data and measure the impact of the intervention. As we initially intended to measure both engagement and attainment, we looked at the Leuven scale of engagement, Myself as a Learner, various Early Level numeracy assessments and the EYF Early Years Learning Framework. The group agreed that we required quantitative data which would give an indication of the children's numeracy abilities before and after the intervention. After struggling to find a

**Methodology**  
The intervention chosen for this project was the SEAL approach: *Stages of Early Mathematical Learning* from the book, *Teaching Number: Advancing Children's Skills and Strategies* (Wright et al., 2006). This approach is a structured, adult led programme, designed to support learners through developmental learning phases in numeracy. The programme outlines core skills which can be explored through simple activities using a variety of resources. They can be repeated in various ways to suit the interests of the learner. For our research project, we agreed it was not possible to be completely prescriptive about the activities used in the intervention and instead each practitioner would need to be responsive to their learners. However, we were able to specify a small section of the 'Emergent Child' phase which guided our activities and ensured some consistency between settings.

Our intervention ran as a 6-week programme from February to March 2019 and the activities were taken twice per week. Four underachieving boys from each setting were identified as a target group. The activities were tailored towards their needs however, all children in the nursery were able to access the activities too.

To measure the impact of the SEAL method, pre and post intervention assessments were undertaken with the focus group. As mentioned, we created an assessment which specifically measured skills which were relevant to our intervention. To allow us to analyse the assessment information, a marking scheme was created and used for all three settings.

To ensure our procedures were ethical, we agreed that if our findings were positive, we would ensure all our learners would have access to the SEAL approach following the research. We also agreed to set up a playroom to undergo the intervention and this does not align with current best practice years practice.

**Findings**  
Each of the participants' assessment scores increased following the intervention. **21% of boys had a positive impact on their learning.** There are various factors which may have also had an impact on these results, predominantly all other numeracy related learning experiences available to these children both in nursery and at home.

The average difference in assessment scores for Glenwood was an increase of 28.25. The average difference in assessment scores for Braidbar was an increase of 27. The average difference in assessment scores for Busby was an increase of 22.5. **Across the three settings, the average difference in assessment scores was an increase of 26.25.**

In addition to the quantitative test data, some anecdotal, qualitative data was also recorded. Teachers recorded observational comments during intervention sessions and during assessments. Observations included:

*Much better understanding and has enjoyed the adult interaction.*

*Confidence has improved when joining in as a group. When counting independently they will say numbers beyond 9 with a big smile on his face.*

*Secure understanding of numbers to 5, and would benefit from continued support using this approach.*

These observations suggest that the teachers observed an improvement in the children's behaviours and attitudes as well as their assessment results. These observations also suggest that the SEAL approach is a suitable intervention for the target group.

**Key Learning Points**  
Through this process we have been able to develop our early years numeracy pedagogy. Revisiting the SEAL approach and putting it into practice has allowed us to better understand the early numeracy learning. Some of our findings were unexpected and we have come to the conclusion that adult led, direct teaching can be very effective in an early years setting. Following our project, we intend to further examine the balance of adult led and child led activities in our playrooms.

Possible areas for further research following this project could be using the SEAL approach at older stages, repeating the study over a longer time.

**Conclusion**  
Adult input using the SEAL approach appears to have had a positive impact on numeracy learning for preschool boys in an early years setting. We found the regular, one-to-one focused teaching to be a crucial element of this intervention. We also found the programme structure to be very supportive in terms of its repetitiveness and pace.

Following our project we will be implementing this approach with all our learners with particular focus on those requiring some additional support within the area of numeracy.

**References**  
Wright, J., Martind, J., Stafford, A. & Stranger, G., 2006. *Teaching Number: Advancing Children's Skills and Strategies*. London: Paul Chapman.

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Wright, J., Martind, J., Stafford, A. & Stranger, G., 2006. *Teaching Number: Advancing Children's Skills and Strategies*. London: Paul Chapman.

*They look a bit different but I know they're the same number. Look, I can count to show you!*

*I can get to big numbers when we do this way.*

## Future Training Sessions

St John's Training Room

- Monday 17 February 2020 at 3.45–5pm
- Wednesday 1 April 2020 at 3.45-5pm

## SIPP Blog—reminder!

The Blog can be accessed at:

<https://blogs.glowscotland.org.uk/er/practitionerenquiry/>