The enquiry

Our journey started as an action research project on pupil pedagogy, based on the following research question:

‘To what extent does a focus on pedagogy to promote boys’ literacy and pupil problem-solving skills impact on pupils’ resilience?’

Whilst this has remained our focus for the enquiry, the structure and plan of the professional learning journey has evolved significantly. This report will therefore focus on the effectiveness and relevance of the different methods of action research to meet the need of different projects, as well as outlining the results of each project.

The staff development journey

At the start of the year our intention as part of this project was to utilise the ‘Lesson Study’ approach as a main tool with all staff. This had been very successful within the ‘Mathematics & Numeracy project 2018-19’ and the aim was to refine and upscale to over 60 teachers. As the year progressed, it became evident that a variety of methodology for enquiry was more effective in response to the different projects on the new curriculum, particularly for the whole-school project. Action research therefore changed significantly throughout the process.

An AoLE approach – ‘Lesson Study’ & research papers in Maths & Numeracy

Background

The initial idea was to expand and refine the successful action research undertaken in the Mathematics & Numeracy AoLE 2018-19. Some strategies seemed to be having an impact on resilience and we aimed to explore this further. The AoLE once again planned collaboratively with a focus on developing pupils’ independence and problem-solving and reviewed the outcomes in light of the five proficiencies. However, this time rather than work on maths topics as previously with area and algebra, the AoLE worked on the concept of ‘Journeys’ as part of a whole-school focus for Year 7. An action research cycle of planning, acting, observing and reflecting was used along with pupil and teacher feedback aiming to plan a refined opportunity for Year 8. This not only developed teachers’ action research skills using a new methodology, but also helped teachers develop new knowledge and promote reflective pedagogy.

Collaborative planning
In 2018-19, planning a series of lessons collaboratively on a specific mathematics topic for everyone to follow proved too restrictive. It removed important spontaneity and flexibility to respond to pupils, which is a natural element of pedagogy. Therefore, key resources and concepts were agreed but flexibility in planning was maintained and this method proved effective. However, when planning in 2019-20 on the concept of ‘Journeys’ for ‘Freedom Fortnight’, it was more appropriate to apply consistency in the resources, methodology and outcomes because of the flexibility and breadth of the topic.

Observing

‘Lesson Study’ had previously proven a useful tool for observing lessons. The analysis of lesson observations and identification of key issues offers a differing way of recording observations. A second round of observations was enhanced by using the ‘Leuven Scale of Engagement’. In the current cycle it was not practical to organise the observations as part of the ‘lesson study approach’ but was planned for later in the year with year 8. Instead qualitative data was collected using pupil voice and teacher surveys together with discussions with parents and external visitors.

Planning research

In the planning stage a new model for using academic research was trialled and worked very well. The lead, an experienced researcher, allocated a different research paper on resilience to each pair of staff to read. Departmental time was then used to discuss and feedback. This proved very effective, with staff reading resources which were relevant to the project without having to take time trying to find relevant articles; it also gave staff a starting point if they chose to explore further. The discussions proved very interesting but finding enough time to explore more fully was a challenge. Key strategies for resilience evolving from the research, such as group work, discussions, ‘stop-start-go approach’ and independent learning were then utilised.

Feedback from the project to inform future planning

Feedback from pupils, parents, staff and visitors indicated that the project was an enjoyable learning experience. Refinements were made based of the feedback and it was planned to repeat the series of refined lessons with Year 8. Pupils would work in mixed ability groups for this experience to see whether resilience would be enhanced by working across the ability range. Using Lesson Study and the Leuven Scale would allow staff to study the engagement and motivation within the classroom. Unfortunately, due to lockdown this second part could not take place.

An AoLE approach – A specific focus: Using previous research to explore a new approach to reading in LLC
The work on improving literacy, in particular boys’ literacy, involved work both within LLC and across the curriculum. Departments explored new pedagogical approaches. The ‘Just Reading’ project was based on a project undertaken by Sussex University and involved a term where half of the Year 8 teachers read two novels back-to-back, at high speed, with a focus on maintaining the flow of the book while developing in-class questioning and discussion. Pupils’ reading skills were tested at the beginning and end of the project. Pupils and staff completed surveys to evaluate the effectiveness. Feedback indicated that the pupils enjoyed this approach to reading, with pupils commenting that they found the texts easier to follow when read at pace, and by an expert reader; that they feel they are better at retaining the information; and that they are enjoying the experience of reading more. Re-testing indicated significant improvements for pupils whose reading age was low compared to their chronological age at the start. This approach to reading will now be adopted in future Year 8 schemes of work.

Lockdown learning/Blended Learning

From the research on attitudes to reading the department recognised that many students would not be reading regularly at home. They therefore needed to encourage reading with parents and pupils to maintain the momentum. Google Classroom and Instagram were used to share recommended reading lists and authors; Twitter and Facebook to share EEF guidance on how to support young people with reading and a ‘First Chapter Friday’ was established where each week the opening chapter of a novel was shared and promoted. Initial responses indicate these have been successful.

CPD spotlight in lockdown

A ‘Curriculum Thinking’ document allowed staff to work collaboratively during lockdown to begin to shape the department’s vision for the new curriculum. This was enhanced by a weekly ‘Bulletin’, which included a suggested professional learning blog, text or video signposting staff to the wealth of CPD material available. Both these resources will continue during the autumn term and it is hoped will be enhanced by face-to-face contact.

KS2/3 enquiry – the five mathematical proficiencies

The continuum of learning is a key feature of the new curriculum and therefore the involvement of our partner primaries in the action research has been important. Whilst the Mathematics & Numeracy AoLE is the main focus of learning for a mathematics department in a secondary school, it is just one AoLE of six which primaries need to be adopting. Because the structure of the Maths & Numeracy document included Number, Algebra, Shape and Statistics and was therefore similar to previous structure, it was feared that the message about the pedagogy, the proficiencies and need for deep understanding could be lost. The ‘Lesson Study’ approach and lesson observations between different primaries and then KS2/3 allowed staff to share good practice.
Moving forward, a training event by a QI teacher involved in the construction of the curriculum re-emphasised the role of the proficiencies and the need to focus on pedagogy in the delivery of maths. Following the training, the group decided to use the models and examples given on the proficiencies to build a bank of examples across the progression steps for particular strands e.g. place, value and angles. This could then be shared with staff in all schools. At the next meeting as we worked in groups to develop these exemplars, it became apparent that it wasn’t the resource that staff would need but rather that they would need to go through the challenge of the process themselves, mapping a topic to the proficiencies to gain the understanding of the proficiencies.

A whole-school/federation approach – ‘Freedom Fortnight’

The momentum of work towards the new curriculum accelerated in Bryngwyn during 2019-20, from exploration of the new requirements and experimentation within departments and AoLEs to a greater focus on a whole-school approach for developing and trialling materials. Developing a whole-school approach was therefore a priority. Bryngwyn pupils and staff were asked to consider what made Bryngwyn unique, what was our ‘Bryngwyn DNA’, what skills and experiences did Bryngwyn pupils need and what concepts or ‘big ideas’ could we explore related to our area and our pupils. It was decided that our action research would result in a ‘Big Ideas’ learning event in January 2020. We would engage staff in working in AoLEs to plan to provide a learning experience that addresses the aims and intentions of the new curriculum and meet the ‘four purposes’ for our learners. The brand ‘Freedom Fortnight’ was born and captured the spirit of the innovation. INSET time, whole-school focus meetings and AoLE meetings were allocated to explore the new curriculum and create different learning experiences and resources to trial within a normal school timetable. Elements of action research involved researching, planning collaboratively, trialling materials and improving prior to the event. AoLEs had the flexibility to approach the concept in different ways. It is important to note that we worked as a federation and Ysgol Glan Y Mor mirrored this approach on their chosen ‘Big Idea’ of ‘Making Waves’. Post-event analysis involved student voice, parental perception and feedback from other stakeholders while a showcase event celebrated the work of the pupils.

Our action research learning journey – a summary of our observations

- Educational research can take many forms
- An action research cycle of planning, acting, observing, reflecting and refining along with pupil and teacher feedback can be powerful
- School ethos and structures need to promote enquiry
- A whole-school focus can accelerate and deepen the learning experience for all
- Enquiry needs to be relevant and current
- Collaborative working enhances enquiry
- Investing in establishing good working relationships and trust is important
- The need for collaboration between primary and secondary is crucial in ensuring the continuum of learning
- Process is often more important than outcome
• Established teaching and learning groups, both pupil and staff, provide a vehicle for feedback
• Research does not rely on comparing one group with a control group
• Qualitative data can be as informative as quantitative data
• Exposure to the different methods of enquiry through training and experimentation will allow staff to make informed choices and therefore produce powerful research
• Models of research can be used and refined successfully, e.g. Lesson Study, Leuven Scale of engagement
• It does not matter if your research fails to discover what you wanted. Any research will make you better informed
• The methodology used should meet the needs of the project. One size does not fit all