The Meadow Community Primary School and Pre-School

Curriculum position statements – **August 2023**
Science

Historical

I am now in my sixth year of leading science at The Meadow. Under my lead, the school achieved the Primary Science Quality Mark in July 2020. Science is now evident everywhere in our school from working walls in classrooms to whole school displays and science themed assemblies. As part of an Ofsted visit in October 2021, science was chosen for a subject deep dive which contributed to the overall 'Good' outcome achieved by the school. For the last three years, I have also chaired the science lead meetings for all schools within the Symphony Learning Trust. Five years ago, I introduced the idea of science ambassadors to The Meadow where children in years 2 to 6 nominate one class rep to work with me. During this time, the science ambassadors have been involved in many activities from conducting a lunchtime science club in the playground to promoting and judging school science competitions. Being a science ambassador is always an extremely popular role and the children wear their science ambassador badges with pride. As science lead I value the contributions the ambassadors make to how science is managed within the school. It is a fantastic way to ensure that the children's voice is heard and that they are involved with the science curriculum both in and beyond the classroom. Our journey to raise the profile of science at The Meadow will always continue but myself, staff and the science ambassadors hope that our enthusiasm and enjoyment of science is visible for all visitors to see.

Current

At The Meadow Community Primary School, the science curriculum is designed to engage, inspire and challenge our children. Through quality first teaching and enrichment opportunities we aim to encourage a thirst for learning which will prepare our children for life in an increasingly scientific and technological world.

Science teaching at our school is good when…

- It is 'hands on', engaging and fun
- Exciting enrichment opportunities are provided
  It encourages children to initiate and answer their own questions
- It increases science capital
- It has a purpose and relates to the real world
- Stimulating and high-quality resources are used
- It allows children to pursue their natural curiosity and to feel like they are scientists
- It is cross-curricular and embraces opportunities to learn outside the classroom

The school follows the Plan Bee Science scheme of work because it is high quality, demonstrates progression in learning and fully covers the requirements of the science national curriculum. Alongside this scheme, I also encourage staff to use the PLAN Assess knowledge matrices and progression documents as they complement the PLAN BEE scheme and were highly recommended when I did PSQM. These documents are particularly useful for looking at prior and future knowledge and ensure there is no repetition in teaching and learning. Meadow staff welcome opportunities for science CPD and were incredibly supportive of the PSQM process. Learning in science is regularly shared on year group Twitter feeds and we encourage parents to engage in their child's learning in science through homework projects and competitions – which always receive high numbers of entries.

Last year, I introduced an updated and simplified assessment system for years 1 to 6 which was put together by myself and the Symphony Learning Trust science leads. At the end of each term, each year group is also asked to complete a termly tracker to monitor the progress of boys, girls and the year group overall. This information is then analysed by me so that any key stage and cohort issues can be identified and addressed. At the end of the academic year 2022-2023, except for one year group, data across the school was good with 78% of year 6 children working at the expected level for science. Overall, in science children at The Meadow are making good or better progress.

With the help of the science ambassadors, science now happens beyond the classroom through a variety of enrichment activities such as Science Week, science assemblies and ambassador led lunchtime workshops. Last year, myself and the science ambassadors also had the opportunity to work with Dr Kaitlyn Zavaleta from De Montfort University to apply to become young science reviewers for the children's science journal, Frontiers for Young Minds. Unfortunately, at that time the journal was not taking on anymore panellists.

In March, we were again lucky enough to have Dr Kaitlyn Zavaleta spend a day in school hosting workshops about her area of work in neurological science with years 2, 3 and 4. The day was a huge success and it was wonderful to observe the children and listen to the interests and questions the children were asking in these sessions. We also held a whole school Dress as a scientist day which was highly enjoyed and saw children dressed as everything science themed from astronauts and lab technicians to fire fighters and hairdressers.

In the summer term, I was able to arrange a 10-week programme of Lego STEM sessions for year 1 which was facilitated by Leicester City Football Club's community scheme and fully funded by The Royal Academy of Engineering. The staff and children thoroughly enjoyed this.

Finally, last year a new and very pro-active science governor, Mrs Hannah Wolloff, was appointed who is very keen to get involved with science at The Meadow. In Jun. 022 Hannah joined me to conduct an annual book scrutiny; the purpose of which was to share with Hannah how science is taught at The Meadow. We were both extremely impressed by the standard in books and it was great to see that all year groups were using the five enquiry type labels I had introduced previously at a staff meeting in October 2022. A couple of children in year 3 also shared their books with Hannah in person and again, we were so impressed by the children's knowledge and the scientific language they were using and had retained from lessons.

Future aspiration

As subject lead, the most rewarding part of completing the PSQM process was seeing the impact raising the profile of science in school has had on the children. Their enthusiasm for science lessons, enrichment events and homework projects has been incredibly encouraging. Children often tell me about their science lessons, places of interest they have visited or bring in investigations from home to show me. With a vision to engage, inspire and challenge children for the future; we are well on our way to achieving this at The Meadow.

The focus and direction of science for next year is:

- to investigate and promote enrichment opportunities in science across the school (visits to places of scientific interest, visitors into school, workshops, funded sessions etc)
- to work with Mrs Wolloff, science governor, to carry out some pupil interviews and science lesson observations.
- to continue to implement the study of famous scientists (past and present) into each year group's science units to help widen the children's awareness of people in science and to promote science capital.
- to continue to work with other schools in the trust as Chair of the Science SLT.
- Organise enrichment events for Science Week 2024 linked to the theme Time which will hopefully see us having visitors and parents into school again.