

How a school develops one aspect of its SDP: a report that critically reflects on the actions, impact, and evidence-based

Introduction

Throughout this assignment, I will endeavour to critically reflect on the actions, impacts, and evidence that affect the school based on one aspect of the school development plan (SDP). The one aspect I will focus on will refer to priority two of the school's SDP. This priority focuses on improving opportunities for pupils to use numeracy skills independently across the curriculum and within the school. Within this priority, I will focus on how numeracy skills are provided in engaging and appropriate ways throughout the nursery to year 6.

This assignment will follow BERA (2018) guidelines throughout, to ensure the school is unidentifiable. The school will be identified as School A, school holds 218 pupils from ages 3–11. Throughout personalised assessments in 2022–23, 57.01% of pupils from key stage 2 progressed in their mathematic assessments (■■■■■, 2023). Compared to 53% of the national average in 2022 (Primary Tools, no date) The school discussed that all the children who entered their Nursery in 2022/23 had skills below those expected across the areas of the foundation phase (FP).

Literature review

Welsh Government (2014) expresses that an SDP is a school's strategic plan for improvement which sets out actions that will be taken to improve learners' outcomes. The SDP will be informed by the regular self-evaluation a school undertakes of its performance and contextual data and will contain the schools' priorities with short- and long-term targets. The priorities will be addressing the national priorities of the

following: raising standards in literacy, and numeracy and reducing the impact of poverty on educational attainment. Similarly, Hesketh (2010) states that the core of the SDP is self-evaluation, using performance and other information, leading to overall sustained self-improvement. Through effective evaluation and actions that flow from it, should deliver improved educational outcomes and experiences for all pupils. Estyn (2020) further protests the vitality of self-evaluation, as a collaborative process which allows for priority areas to be developed within the SDP, allowing successful implementation and documented actions to be taken. School A uses an online document for the SDP, which can be accessed by all staff members, within this document the school can view any developments to the current aims of the SDP, following the aims coherently throughout the academic year.

As previously discussed, one of the main priorities a school should involve within their SDP is raising standards in numeracy throughout education. Due to the national effects on results and attainment in numeracy and mathematics throughout COVID-19, it became a national focus on foundational skills to enable learners the access, breadth and balance the curriculum moving confidently towards their ongoing education (Welsh Government, 2023). School A's standards to develop opportunities for pupils to use numeracy skills independently across the curriculum focused on learners making progress in mathematics and numeracy where they can attain the expected level. School A therefore provides greater opportunities for numeracy to be used across the curriculum when linked to all topics and areas of learning and experience, which is then evidenced through topic books. Hwb (2022) outlines that Mathematics requires a conceptual connection and coherence, which implies understandable learning. It should be considered how learning links across areas to achieve holistic approaches. Mathematics and numeracy can be used across all areas to enhance, stimulate, and support learning for all (Victoria State Government, 2022). Throughout school numeracy was taught through real-life contexts which incorporated money, flight times, bus times and times across the world, this ranged from nursery focusing on more practical aspects of learning to year 6 who followed reasoning during mathematics. Murphy (no date) explains that providing mathematical problems that identify and describe the problem as a basic, creative, and fundamental surface-level of understanding can support the development and confidence of learners to go much more profound and conceptually

understand mathematics. Boaler (2022, p. 220) further discusses the key to understanding math is making sense of it in a creative way that will allow learners to engage and associate it more enjoyably and expressively across areas of the curriculum. This will support the children in recognising and understanding mathematics in a deeper sense. Hwb (2020) acquiesce to Boaler (2022, p. 220) that the application of mathematics in real-life contexts plays a critical part in our everyday lives.

Therefore, mathematics and numeracy experiences must be as fundamentally engaging, exciting and accessible as possible for learners to have experiences that are geared towards mathematical development and resilience. School A ensured to incorporate accessible math lessons and activities for all, using creative and real-life context resources such as money, bus schedules and flight times, planting, cooking, painting, and physical education. Thus, understanding the difficulty of mathematics is beneficial when creative, offering children a sense of understanding and development when learning mathematics creatively and in real-life context situations (Sánchez, Font, and Breda, 2021). Allowing math to be creative differs from the struggle children have when faced with mathematical problems, Ramirez, et al (2013) explained that mathematic anxiety has been recorded in learners as young as 5 years old. Mathematical anxiety is operationalized as fear towards mathematics, stress, and nervousness, that follows the uncertainty of what to expect during math lessons and activities (Tok, Bahtiyar and Karalök, 2015). Therefore, providing a sense of understanding through this subject can reduce the anxiety of learners and open a sense of belonging for them. Jeffrey & Craft (2001) cited by (Tok, Bahtiyar and Karalök, 2015b) illustrated teaching math creatively is an effective pedagogy that improves the quality of education, allowing learning to be meaningful which allows access to more exciting ways of approaching the curriculum through mathematics and numeracy (Beetlestone, 1988, cited in Tok, Bahtiyar and Karalök, 2015b).

Developing an action point

HWB (2014) stated sustainable school improvement should be supported by effective short and long-term planning, which is linked to challenging targets. This

plan is a continuous cycle in which a school will reflect upon its performance, identify priorities for improvement, develop strategies to address them, act and review progress and impact. The priorities for the SDP can stem from progress and attainment, Estyn reports and contributing to the four purposes of the curriculum through effective practice (Welsh Government, 2022, cited in CSC, 2023). School A referred to Estyn's report from 2020 as a basis for their priorities towards their current 2024 development plan. Throughout School A's SDP they do not underpin where the priorities come from but based on a professional discussion that was held, a member of staff discussed that their priorities were from previous Estyn inspections. Nonetheless, the SDP underpins the data on children's numeracy and mathematic progress and attainment throughout the years was focused on a self-evaluation (Goldstone, 2022). Following the priority of the numeracy aspect school A aims to audit current math areas to link to other areas of learning and experience (White, 2022). McKinsey & Co (2010) cited in (The Open University, no date), similarly stated developing a vision for your school is an important part of being an effective school leader. Setting a vision and direction for their development plan contributes to full success. Due to learners fare poorly in mathematics it is discussed that integrating mathematics within other areas of learning will help students improve their performance in math and other subjects (Noraini Idris, 2009, p. 2). Welsh Government (2023b) divulges numeracy alongside other areas of learning as a mandatory legislation within the curriculum for Wales. This attests schools and settings must support and develop learners' skills and should consider how they can be applied and developed. School A imposed a 4- year plan which involved staff and governors within this specific action plan. This provides strong opportunities to share and develop practice within the county allowing coherence and quality assurance for a range of educational leadership to be developed (Estyn, 2023). Open University (no date) evaluated that governors, practitioners, carers, and learners work as an effective team; parent-practitioner collaboration allows for ongoing support to be provided for the needs of the learners. Welsh Government (2023a) expressed the national mission of Wales is to raise standards and the attainment of all children, ensuring that a governor plays a vital role in a mission that focuses on teamwork. Within school A's SDP many members were underpinned to work towards the goal, using the deputy head, head of numeracy, head teacher and chair of governors to support the ongoing process of developing mathematics throughout all areas of

learning. Additionally (Gray, 2020), expressed that more is achievable when working alongside other year groups, other local authorities, communities, parents and multiple agencies.

Regarding the costs of the project, School A funded £220 to identify strengths and areas for development. This allowed for an understanding of the progress and attainment of mathematics within the school to be identified. Edutopia (2008) states that assessment is an integral part of instruction as it determines whether the goals of education are being met. School A does not fund any other interventions yet focuses on the integration of mathematics in other aspects of learning and experience. Different areas of mathematics are highly interconnected which draws on prior learning to understand new topics. It should be considered that learning links across areas to achieve holistic approaches to learning. mathematics and numeracy can be used across all other areas to enhance, stimulate, and support learning (Hwb, 2022b). focusing on the areas of learning and development all staff in School A understands and develops their ongoing practice to ensure the curriculum for Wales is being used across all classrooms. Schools should design their curriculum tailored to everyone's needs while supporting their wellbeing. Every pupil will benefit from learning that continuously supports them, with life skills and knowledge to reach their full potential (Welsh Government, 2022a).

School A's development plan has been a 4-year process and is currently ongoing, therefore when reviewing impact, the evidence is based on the children's theme books, where staff can track their progress as well as use creative, real-life authentic materials to enhance their mathematic lessons. Ofsted (2001) discussed that timescales need to be realistic, have a sense of urgency and fulfil the statutory requirements for schools in serious weakness. This will take one academic year when development plans can act. Naht (2020) stated, that demonstrating rapid improvement can lead to schools adopting approaches that are effective practice in other schools. Therefore, sustainable improvements take time, and having a greater understanding of the research, combined with knowledge is critical to success over longer periods. Welsh Government (2019) consequently states that the process of an SDP should follow a 4-year process as it facilitates the most effective use of resources. Thus, school A has adopted a reasonable time scale which can lead to

effective school improvements. Referring to the evidence on how School A involves evidence to establish their improvements on math being used in other areas of learning, they use these books. Evans (2017) reported that inspectors rely heavily on using books as evidence of standards of teaching, learning and assessment. This allows for progress to be viewed over time instead of progress within small time-scaled observations. Although evidence can be showcased through books, evidence in the foundation phase would benefit from being shown through picture or video evidence. Efl (2011) discussed that video and photo evidence can be annotated and reflected in any instance, this can support learning in any assessment framework and model, which allows for evidence of progress to follow targets. Therefore, to track reliable progress which can be evidenced in video and picture format School A should adopt a process which Efl (2011) can offer to apply video-based evidence in schools to understand the progress of children in their mathematic application during other areas of learning (Naace, 2016).

Reflection and evaluation

The aspect of School A's SDP, they have followed the planning cycle as a clear focus to their process, schools must determine the cycle of self-evaluation and development that works for them, within the confines of the timescale outline of three years (Welsh Government, 2014b). School A had a 4-year cycle which is still ongoing, this allows for developments to be tracked thoroughly and contain detailed priorities. A school development provides effective and efficient resources when given a larger timescale to identify the areas that need development (Gudith, 2023). School A continuously reviews their practice to ensure their action priorities are being met, this has been processed through monitoring and assessing their progress, they review what has been done and what the next steps are, who will do it and the timescale for when it should be met. Ylimaki and Brunderman, (2021) discussed that mainstream school development approaches have been constructed to hold schools accountable and must demonstrate evidence for the quality and equality of outcomes as required by policies. Reviewing the SDP, a drawback that could support learning and development further would be to include interventions that have been proven to support mathematic skills throughout all areas of learning.

Based on the literature evidenced throughout this assignment, it has been identified that mathematics throughout all areas of learning allows children to separate their anxiety for one subject and incorporate the enjoyment of other subjects within mathematics. McPhail, 2018; Thibaut et al (2018) cited in (Collins, 2022) expressed that the practice of curriculum integration involves combining elements from multiple subject areas to form a coherent learning unit. Ní Ríordáin et al., (2015); and Treacy & O'Donoghue, (2014) referred by Collins (2022) furthermore state, that to support a curriculum integration in mathematics centres around the learning benefits it may provide over traditional instruction. It is claimed that integrated mathematics teaching can enhance motivation and engagement throughout learning.

Conclusion

This assignment has briefly identified the process of a school's SDP and how to structure an effective plan to develop its aims with supportive stakeholders. This assignment has identified literature that supports the decisions and structure of the school's SDP, allowing for criticism and acknowledgement of the strengths and weaknesses of the school's development process. For school A to develop their process of applying mathematics in all areas of learning it would be recognised that they provide an intervention in which learners can apply their personalised knowledge of mathematics throughout their favourite areas of learning, to develop their understanding and grow their confidence.

To develop my practice and ensure my support influences the development of an SDP, I will ensure my pedagogy follows the Welsh Government prompts which supports and develops my pedagogy throughout the school. This will ensure to be used to discuss with all staff and stakeholders which can help identify appropriate improvements and activities to develop further with an understanding of pedagogy. Throughout my practice, it will also be considered to enquire support that holds deeper evaluation which will allow learners to develop what is needed for them (Welsh Government, 2022c).

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