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Promoting Collaboration and Development among Teachers through Professional Learning Community in a Primary School

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Synopsis:

An inquiry-based disposition forms the basis of the Professional Learning Community (PLC) in South View Primary School. All teachers in the school organise themselves into professional learning teams, based on their teaching subjects to engage in reflective dialogues and to create knowledge in classroom practices so as to enhance student learning. Through such a learning community, a culture of collaboration is being fostered. In South View Primary School, three different inquiry approaches are adopted by the professional learning teams, namely Lesson Study, Learning Study and Action Research. The school's PLC adopts a different-means-for-acommon-purpose approach embracing the three big ideas of (1) ensuring that students learn; (2) building a culture of collaboration; and (3) focusing on student outcomes.

Lesson Study by the Science Teachers

One common challenge faced by many pupils was the differentiation between the concepts of heat and temperature. The focus of this Science Learning team, who adopted the Lesson Study approach, was to understand pupils' way of thinking and to design lessons to ensure that that they had a clear understanding of the two seemingly similar but distinctively different concepts. The main teaching strategies used in the lessons include (1) the provision of concrete experience (hands-on experiments) and (2) questioning to scaffold learning and stimulate thinking. The team will share their learning process, from the analysis of pupil data, understanding the challenges of the pupils, teachers' discussions, lesson plans and the final data used to evaluate the effectiveness of the revised lesson plans.

Learning Study by the English Teachers

An analysis of the Primary 4 results showed that only 14.5% of the cohort managed to answer inferential questions correctly in an examination. In this second segment, the English Learning Team will present their collaborative research done to improve pupils' ability to infer while reading and their ability to accurately reflect their answer in written form. The English Learning Team adopted the Learning Study approach in their research. Learning Study is a type of collaborative action research driven by the

Variation Theory as an explicit theoretical framework to guide, analyse and evaluate pedagogical approach. Through pupil interview, the team found that pupils merely used keywords in the text to answer inferential questions at the literal level. Using the Variation Theory, the team designed lessons to get pupils to activate their prior knowledge when they approach a text. The team will share the effectiveness of this strategy and their key learning points.

Action Research by the Math Teachers

Pupils tend to say, "I know the answer but don't know how to explain it." This is an indication of having procedural understanding of Mathematics skills but lack of conceptual understanding. This hampers pupils from making sense of their learning. The Math Learning Team adopted Math Journaling as an intervention strategy to address the concern. Math Journaling requires pupils to reflect on a topic and internalise the concepts in order to pen down their thinking processes and strategies. It encourages pupils to make their thinking visible. The team conducted an Action Research to find out the effects of Math Journaling in deepening pupils' understanding of mathematical concepts. Action Research is a systematic process of inquiry which gathers evidence-based data to evaluate if an intervention is effective and significant. The data analysis showed found that Math Journaling not only helped pupils deepen their conceptual understanding but had also encouraged them to use the correct mathematical language to express their thinking process.