

HOLY SPIRIT COMMUNITY SCHOOL



Maths
Maths

Holy Spirit Community School

North Ringwood

PREAMBLE:

Mission Statement

At Holy Spirit Community School we seek to develop deep mathematical understandings, knowledge, skills and strategies, that will empower students to apply their learning, and live numerate lives in a constantly changing world. This is based on the Victorian Curriculum.

IMPLEMENTATION:

CURRICULUM:

Professional Learning Team Meetings

- Conducted fortnightly.
- Use PLT meetings to improve pedagogical content knowledge by engaging in professional reading and dialogue and develop ideas for future learning for differentiated cohorts of students.
- Analyse, interpret and set directions for improvement using data.
- Analyse and moderate Mathematics work samples.
- Share teaching and learning strategies, activities and resources.
- To be conducted in teachers classrooms on a rotational basis, in order to share Mathematics learning environments.
- Agenda to be set by SML and distributed to staff prior to the PLT meeting.
- Minutes to be taken during PLT meetings and available to staff after the meeting.

Planning

- Units of Mathematics should be planned in order to scaffold students in building a relational understanding of Mathematics.
- Units of work should attempt to incorporate more than one content strand/ sub-strand of the Mathematics curriculum and make links to real life contexts.
- Teachers plan according to the planning process developed by Holy Spirit Community School, and use appropriate documentation accordingly.
- Time is to be dedicated weekly to using formative assessment and school based curriculum documents to plan for future lessons.
- Teachers are to plan collaboratively, in year-level teams, contributing to the development of units and ensuring that there is a consistent approach across teaching teams and the school.

ASSESSMENT:

- Assessment practices and tools used by teachers are used as a vehicle for Mathematics teaching and learning by showing evidence as, of and for learning.

Assessment “AS” Learning

- Students are independent, reflective learners and show evidence of their learning by:
 - Using both individual and class Reflective Journals
 - Understandings are displayed on Mathematics Walls

Assessment “OF” Learning

- Professional judgments about student achievement are formed by:
 - Evidence collected that demonstrates an acquisition of skills and understanding that have been set by the teacher when planning units of work in accordance to curriculum documents.
 - NAPLAN data received.
 - SINE/PAT data collected.
 - Writing formal reports to parents biannually.
 - Formally meeting with parents two times a year at Parent Teacher Interviews.
 - Create rich assessment tasks and rubrics to moderate work samples to be included in student portfolios as a form of feedback to students and parents.

Assessment “FOR” Learning

- Teachers use student data to drive their teaching by:
 - Administering pre-assessment tasks to ascertain the point of need in individual’s learning and differentiating instruction accordingly.
 - Keeping observational records of student achievement to be used when planning for future lessons.

APPLICATION:

The Numeracy Session

- To be conducted daily for an hour.
- Must have an explicit focus and purpose linked to the key understanding aimed at student learning.
- Need to be consistent with the following elements:
 - Whole Class / Tuning In
 - Investigation / Activity
 - Reflection
- Other elements to be considered as part of the daily Mathematics Program:
 - Tools/Fluency
 - Teacher Summary

Whole Class / Tuning In

Information gathered from assessment before beginning a unit as well as previous lessons will help guide this part of the session.

It introduces the key understanding of the lesson and informs the students of the “focus” of the lesson.

Eg: “What idea is it that you want them to understand by the end of the lesson?”

It also sets the context for their learning and provides instructional teaching time to lead them into the investigation, without “giving away” the maths/strategy (etc.) that you want them to discover.

Investigation / Activity

This is a time for inquiry, discovery, practice, reinforcement and extension of understandings.

Most times, students will be working collaboratively with structure of the groups being flexible.

Depending of the purpose of the investigation/activity, individual work is appropriate. During group activity the teacher needs to rove and listen to the students conversations identifying their strategies and responses.

The task in which the students are engaging in should be...

- Open, so that a variety of solutions and strategies can be used.
- Flexible, in that students are able to record their findings in their own way.
- Connected to the “understanding” being developed.
- Have a real-world context so that it is relevant and engaging.
- Student directed.

Reflection

The purpose of share time is that the children share their discoveries with the group. This often needs to be teacher directed.

The teacher can direct specific students to present their response and the strategy used from what they have observed.

The teacher leads the students to make the mathematical connections and show evidence of their understanding of the “focus” identified at the beginning of the lesson.

If the students have not come to the “understanding” that was intended for the lesson...

- Make adjustments to future lessons, so that students are able to have further explore the concept.

- Use a teacher summary to draw together the information that the students have already presented to start constructing an idea.

Reflection time should take approximately one third of your total lesson time. It does not have to occur solely at the end of the session, but can also be conducted throughout.

Tools/Fluency

The structure of this component can be varied according to the needs of the students, E.g. - whole class or ability groups.

Use a variety of resources and strategies such as mental computation, short open ended questions & counting activities.

This session further develops the Number Sense and counting skills of students.

If this links in with the other components of the Session and focus of the lesson, it can be done at the beginning of the session. However, if it does not, this element can be done at anytime throughout the day.

Teacher Summary

The teacher concludes the numeracy session with a statement (written or verbal) reinforcing key mathematical understanding.

This needs to be short and explicit / summarising evidence presented by the students, that tie together all parts of the lesson.

ROLES AND EXPECTATIONS:

SML

- Promote a culture that values Mathematics learning for both students and teachers
- Oversee and coordinate the implementation of the SINE and CTLM programs.
- To ensure SINE assessment data is uploaded to the school network each year.
- Inservice staff on VICTORIAN CURRICULUM/NAPLAN data/rich tasks etc.

- Attend relevant inservices, network days and professional development courses relating to the Maths area.
- Oversee Professional Learning to support the sustainability of previous learning and promote the ongoing development of new learning.
- To plan and facilitate fortnightly Professional Learning Team meetings (PLT).
- To facilitate and monitor planning to improve students' learning outcomes through the shared beliefs and understandings related to the teaching and learning of Mathematics.
- Builds the capacity of staff to become reflective practitioners and effective teachers of Mathematics.
- Develop and facilitate the implementation of the Mathematics Annual Action Plan (MAAP).
- Monitor and develop assessment tools and programs to assess students as, of and for student learning.
- Ensure teachers are conducting Numeracy Sessions for an hour, daily.
- Conduct a regular audit on Mathematics resources to ensure they are appropriate and adequate.
- Oversee and be responsible for the Maths Budget.
- Purchase, maintain, and allocate resources for Mathematics Experiences, both internal and external e.g. Classrooms, Maths Competition, Maths Day
- Organise special Maths events as required e.g. entry to Maths Competition, Maths Day, Maths Incursions.
- Meet with the Principal weekly.
- Contribute items to the school newsletter informing the community about the current events in Mathematics at Holy Spirit Community School
- Attend school leadership meetings as a representative for the best teaching practices in Mathematics.

Teacher

- Create a culture of mathematical inquirers in the classroom.
- Attend and actively engage in PLT meetings by contributing to agenda items, discussions and sharing of expertise.
- Reflect and act upon the content and implications for learning and teaching Mathematics, that has been addressed in PLT, Planning and Professional Learning.
- Ensure that the daily Numeracy Session and Mathematics learning environment is uninterrupted where possible and conducted for an hour.
- Develop, maintain and update Mathematics Learning Walls for each unit in conjunction with the students to display key understandings, vocabulary and evidence of student work to support these understandings.
- Be flexible in planning to meet the needs of the students based on assessment data.
- Be prepared to take risks and take risks and explore different ways of planning and teaching Mathematics.
- Utilise opportunities to share teaching expertise with colleagues.
- Openly engage in a process of developing goals, and receiving feedback about your teaching practice.
- Collaborate with colleagues during planning sessions to ensure students are receiving a consistent message and teachers have a common understanding of Mathematics concepts.

- Continue, ongoing Professional Learning in order to stay informed of the current best practice in Mathematics.
- Develop a sense of shared responsibility by all teachers for all students.

Endorsed by the staff Monday 3rd December 2012. Reviewed 2016, in line with Victorian Curriculum

This policy was last endorsed by the School Board in ...

2013