Good Shepherd Catholic Primary School Numeracy Plan, 2010

**Review School and 2009 NAPLAN-Numeracy DATA: Key Findings**

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<th><strong>Cohort Analysis:</strong></th>
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<td>The Year 3 cohort scored below the Australian Capital Territory (ACT) average in Numeracy. The boys of the cohort averaged seventeen points below the ACT average and the girls collectively scored one point above the average. This fact, which is addressed throughout the following NAPLAN analysis, highlights the importance of gender education as a consideration at Good Shepherd School. The Year 5 cohort performed quite well as compared to Territory averages. The cohort scored thirteen points above the Territory marker with the Year 5 boys averaging 15 points above average and the girls scoring three points above average. This disparity also suggests that an awareness of gender education may benefit the Year 5 cohort with girls not performing as well as boys.</td>
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<th><strong>Proportion of Students in each Achievement Band:</strong></th>
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<td>Regarding both the Year 3 and Year 5 cohort performances, there is an over representation of students scoring in the middle to slightly upper bands. Year 3 girls were at Territory averages for representation in Band 1 and 2 while the boys had higher than average representation in these Bands. The entire Year 3 cohort was over represented, as compared to Territory averages, in Bands 3 and 4. The Year 3 boys were under represented in Bands 5 and 6 while the girls were at Territory norms for Band 5 and scored slightly better than ACT averages in Band 6.</td>
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<td>Likewise, the Year 5 boys and girls were below Territory averages for students scoring in Band 3 and 4. The boys were also over ACT averages in the number of scores in Bands 5 and 6 while the girls were slightly above ACT averages for Band 5 and on an even par for those students scoring in Band 6. The Year 5 boys were below expected scores in Bands 7 but were quite a bit above the Territory average in Band 8. The Year 5 girls were slightly above the Territory averages in Bands 7 and Band 8. Concentrating on how to move students from the Level 4 Band to Level 6 in Year 3 and from Level 6 to Level 7 or 8 in Year 5 seems prudent.</td>
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<td>When considering the Relative Performance of Students in Year 3, Numeracy and Reading scores seem to be in alignment, however, Year 3 students scored higher in Spelling, Grammar and Punctuation and Writing then comparatively in Numeracy. Likewise for the Year 5 cohort, Numeracy and Reading were again in alignment, however, Year 5 students, on average scored higher in Spelling, Grammar and Punctuation and Writing then in Maths.</td>
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<td><strong>Results Over Time and Trend Analysis:</strong> Good Shepherd’s performance overall is below the national means in most areas of Numeracy for both Year 3 and 5. Data collected by both ACTAP and NAPLAN testing indicates a continual trend below ACT averages in relative performance in the area of Maths for Good Shepherd students for the 2006, 2007, 2008 and to some degree the 2009 school years. The Year 5 cohort in 2009 was the first class to score slightly above Territory averages in Maths.</td>
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Item Analysis and School Reports Table 4 and 5 together with Item Performance: Consideration of performance on individual items has occurred on several levels. First by the Literacy and Numeracy Coordinators and then in tandem with the entire Good Shepherd Staff and the Catholic Education Office when writing the Good Shepherd School Self-Evaluation Report (SSER). Secondly, all Year 5 teachers and all Year 3 teachers were released from class duties to assist in item analysis. The following trends were established by consensus:

The Year 3 cohort were notably below the Territory averages in: whole number, where students were asked to solve a simple number word problem involving a comparison; Time; Area; Chance; Fractions and Decimals, where students were asked to halve an even number of objects less than twenty; 2D and 3D shape. Good Shepherd Year 3 students performed notably above Territory averages in Patterns and Algebra and Addition and Subtraction

The Year 5 cohort performed notably below Territory averages in: Time, locating a date on a calendar; Identifying a 3D object; Addition and Subtraction; and Multiplication. The same cohort performed above Territory averages in: Identification of a Polygon; Data; Identifying a reflex angle; Fractions and Decimals; Time; Length; Chance; Patterns and Algebra; and Area.
Evaluation of 2009 Numeracy Plan: Key Findings

Many of the goals established for 2009 were reached at Good Shepherd. A Maths Skills Spiral and Scope and Sequence has been produced to ensure that the whole school approach documented in the Maths Curriculum and is understood across the school. With the help of the Catholic Education Office, the staff has engaged in professional dialogue about numeracy pedagogy and how it can be improved including consideration of the Numeracy Block structure, CMIT and assessment. We have greatly increased the use of NAPLAN data to inform areas of need to guide our teaching and learning strategies and to focus on these areas. We are in the process of linking the Quality Teaching Framework and Maths pedagogy at Good Shepherd School. Likewise, we have encouraged and supported staff to attend CEO focus days and other professional development and share newly acquired numeracy understanding with staff. Finally, the school has employed CEO consultants and started a shared understanding about the nature of teaching and learning programs in Numeracy with the whole school community. The CEO professionals in numeracy have consulted with the Leadership Team and assisted in facilitating staff professional development.

There are areas where Good Shepherd needs to continue development:

1. Ensuring that there is a shared understanding of diagnostic assessment across the school. (SENA, NAPLAN and another assessment tool for Year 4, 5 and 6)
2. Continuing to analyse and use diagnostic assessment and external testing data to inform and improve numeracy learning for all students.
3. Developing mathematical investigations with problem solving to encourage higher order thinking. (Including professional development.)
4. Identifying the high achieving students across the school and provide opportunities for them to extend their knowledge and skills.
5. Focussing on integrating numeracy into other areas of the curriculum (IT). Investigate IWB, internet, software resources to expand and support students with differing needs.
6. Integrating Numeracy into other mathematical strands (eg. decimals and length).
7. Ensuring that numeracy resources are accessible, well-maintained and regularly used regularly.
8. Extending teacher understanding of the Quality Teaching Framework and implement it within numeracy pedagogy.
9. Revisiting the Numeracy Block structure and formulating Agreed Practices.
10. Reviewing the place of Count Me In Too in the Mathematics Curriculum.

All of these items from the 2009 Numeracy Plan, which need continued concentration on, are addressed in the Good Shepherd School Self-Evaluation Report (SSER).

Situation Analysis: Key Findings

Good Shepherd School has conducted three on-line surveys of teachers, parents and students. Focus groups were conducted for each of these groups as well. Opinions and information learned as a result of these surveys and focus groups, in addition to the 2008 and 2009 NAPLAN data analysis have shaped the manner in which Good Shepherd School will offer staff professional development, resource Maths requirements and establish Agreed Practices in Maths. Please read this Numeracy Plan in conjunction with the Good Shepherd Catholic Primary School Self-Evaluation Report (SSER).
Goals formulated as a result of the above Findings:

| 1. | Form a Numeracy Teaching Team to address and review some of the larger issues identified in the 2010 Numeracy Plan. Initial implementation of goals is essential but continued review and professional development for teachers is critical. |
| 2. | Numeracy Team to address the issue of providing all students, but especially boys, with stimulus that captures their attention, is relevant and encourages effort. Special attention should be paid to the differing results between the Year 3 boys and girls results with the boys performing far below comparable averages achieved by the girls. |
| 3. | Utilize Friend Framework to assist and review efforts to implement teaching strategies addressing specific Numeracy Plan goals based on NAPLAN results. |
| 4. | Establish a NAPLAN Preparation Team, may utilise Teaching Assistants, to prepare practise tests and answer sheets for teacher use. This team will also help Teaching Assistants to understand format of NAPLAN questions and testing environment. |
| 5. | All Year 2 and 4 students to take 2009 NAPLAN Numeracy test in Term 4 to assist with identification of teaching strategies for the cohorts and assist with preparation of these students for testing. NAPLAN preparation team to assist with compiling and correcting tests. Results to be stored in individual student folders and passed to each student’s Year 3 or Year 5 teacher. Teachers are asked to replicate NAPLAN test environments. |
| 6. | All year groups to explicitly teach application and guided tasks with open-ended questioning in the hope of moving student scores from the middle band of NAPLAN into the higher bands where the school is not as well represented. |
| 7. | In order to accomplish our Maths goals, the Good Shepherd staff will need professional development as delineated in the Good Shepherd School Self-Evaluation Report (SSER). |
| 8. | Movement from the middle achievement bands to the higher ones consideration of extension and enrichment activities should occur. This includes professional development and resourcing to assist implementation. |
| 9. | Develop Agreed Practises in the area of Numeracy after review and implementation of the SSER. |
| 10. | Year 4 and 6 teachers to be given time to analyse the 2009 NAPLAN data for use to specifically prepare for their 2010 cohorts including suggested teaching strategies based on year group and individual trends. |
| 11. | Kindergarten and Year 1 teachers to be given time for data analysis of Kindergarten testing and to discuss specific cohort issues. Results of Kindergarten testing are to be compiled in an individual student folder and handed to individual student’s Year 1 teacher. |
| 12. | Establish a file documenting progress for all students. |
| 13. | Teachers to use the Good Shepherd Scope and Sequence for ELA 16, 17, and 18 together with the Good Shepherd Maths Skill Spiral when planning teaching and learning strategies relating to Numeracy. |
| 14. | Implement staff professional development, resource Maths requirements and establish Agreed Practices in Maths in accordance with the findings, conclusions and recommendations made in the SSER. |
Evaluation of the Numeracy Plan

What are the critical success factors?

 País
That the plan is owned and supported by all staff members.
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That Agreed Practices are developed, implemented and taken on and adopted by all staff.
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That a Numeracy Team is formed and shares leadership with the Executive in the area of Numeracy.
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Assessment and evaluation is on-going and aligned with the Quality Teaching Framework.
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That teachers have the necessary resources to fulfil requirements.
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That all staff have the opportunity to access professional development available.

What are the result measures (indicators of success) of the plan?

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Agreed Scope and Sequence for Numeracy used by staff.
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Agreed Skills Spiral for Numeracy used by staff.
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Teachers understand the function of the Numeracy Block.
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Numeracy is aligned with the Quality Teaching Framework.
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Assessment activities map the progress of all children.
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All teachers have an awareness of what areas need improvement as highlighted in NAPLAN results.
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That the children continue to develop and show a positive attitude towards numeracy.

This plan was reviewed and adopted by representatives of the Good Shepherd Staff on__________________________.

Accepted by ______________________________
Principal Good Shepherd Catholic Primary School