2015 MOUNT PLEASANT PRIMARY SCHOOL SCIENCE OPERATIONAL PLAN

**IMPROVEMENT TARGETS**

Increase the number of Year 5 students scoring above 525 by 10% in the process and conceptual outcome WAMSE Science tests.

Decrease the number of Year 5 students scoring below the WAMSE standard in the process and conceptual outcome Science tests.

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<th>STRATEGIES</th>
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| K-6 Curriculum Leader to continue to support teachers to develop student skills, knowledge and understandings in Science. The role of the Science Curriculum Leader will include:  
  • development of resources, including resources to support the implementation of the *Australian Curriculum*; and  
  • delivery of professional learning, including professional learning to support the implementation of the *Australian Curriculum* as needed; and  
  • management of the Science Cost Centre. | Principal  
  Science Curriculum Leader | Science Curriculum Leader to be provided with time as needed | Science Curriculum Leader reports to all staff each term in relation to the implementation of the Science Operational Plan |
| Provide time for the Science Curriculum Leader to collaborate with primary and secondary leaders from across the Applecross Network to support the implementation of the *Australian Curriculum*. Network to seek support as required from Statewide Services. | Principal  
  Science Curriculum Leader | 2 days teacher relief (TR) @ $520 per day = $1,040 for the Science Curriculum Leader to collaboratively plan | Science Curriculum Leader shares expertise with leaders from across the Applecross Network each term |
| Science Curriculum Leader to be provided with opportunities to attend *Australian Curriculum* professional development, including training offered through the Institute and professional learning as advertised in IPL section of DET website. | Principal | Science Curriculum Leader attends professional development and shares information with staff |
| Promote Science Week as a whole school rotation of activities  
  15-23 August 2015 Making Waves – the Science of Light  
  13-21 August 2016  
  12-20 August 2017 | Science Curriculum Leader  
  Teachers | Consumable resources for activities  
  Sample activities to be distributed | Science Curriculum Leader supports implementation of the *Australian Curriculum* through the delivery of professional development to staff. |
| Support implementation of the *Australian Curriculum* through the delivery of professional development to staff. Professional development to utilise resources available on the Department’s Curriculum Support website, including mapping documents that compare the *Australian Curriculum* content with the *K-10 Syllabus* highlighting new or different emphases or more demanding requirements and assessment rubric as found on the Primary Connections website. | Science Curriculum Leader | School Development Day - 2015 | Survey that indicates that staff engage in effective *Australian Curriculum* professional development |
## STRATEGIES

Build the capacity of teachers through modelling of key instructional strategies, mentoring and coaching. The Science Curriculum Leader will assist colleagues to:

- implement the school’s whole-school approach to learning and teaching Science aligned to *Primary Connections*; and
- effectively translate assessment information into focused, differentiated instruction.

Pedagogical practices to be aligned to the *Curriculum Framework’s* learning, teaching and assessment principles and the Director General’s statement, *Effective Teaching*.

Kindergarten teachers to lay the groundwork for the *Australian Curriculum* and the delivery of the *Primary Connections* units through intentional teaching of content based on the Curtin University resource *Planting the Seeds of Science*. Teachers from Kindergarten to Year 2 to draw on the *Early Years Learning Framework (EYLF)* and accompanying educators’ guide for early childhood pedagogical advice.

Kindergarten teachers access resources from the portal, which include literature as the Engage phase.

Staff to administer 2013 WAMSE Science assessment as a whole school data collection strategy. The Science Curriculum leader to mark the assessment, plot results on a student distribution profile and analyse weaknesses. Alternatively, investigate *Brightpath* Science as an assessment strategy.

Teachers to explicitly teach areas identified by Science data collected as cause for concern.

Science Curriculum Leader to devise, in consultation with the Science Committee, a Kindergarten to Year 7 plan to systematically teach the content of the *Australian Curriculum* (science understanding, science inquiry skills, and science as a human endeavor) using the revised *Primary Connections* resources repurposed to align with the content, capabilities and priorities of the *Australian Curriculum* at each year level, and the *Planting the Seeds of Science* resource. Whole-school plan to articulate the content to be taught each term in: Biological Sciences; Chemical Sciences; Earth and Space Sciences; and Physical Sciences. Plan to consider multi-age classes.

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<td>Build the capacity of teachers through modelling of key instructional strategies, mentoring and coaching.</td>
<td>Science Curriculum Leader Teachers</td>
<td>Science Curriculum Leader to be provided with time as needed for mentoring and coaching support</td>
<td>Curriculum audit indicates whole-school approach is embedded</td>
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<td>Pedagogical practices to be aligned to the <em>Curriculum Framework’s</em> learning, teaching and assessment principles and the Director General’s statement, <em>Effective Teaching</em>. Kindergarten teachers to lay the groundwork for the <em>Australian Curriculum</em> and the delivery of the <em>Primary Connections</em> units through intentional teaching of content based on the Curtin University resource <em>Planting the Seeds of Science</em>. Teachers from Kindergarten to Year 2 to draw on the <em>Early Years Learning Framework (EYLF)</em> and accompanying educators’ guide for early childhood pedagogical advice. Kindergarten teachers access resources from the portal, which include literature as the Engage phase. Staff to administer 2013 WAMSE Science assessment as a whole school data collection strategy. The Science Curriculum leader to mark the assessment, plot results on a student distribution profile and analyse weaknesses. Alternatively, investigate <em>Brightpath</em> Science as an assessment strategy. Teachers to explicitly teach areas identified by Science data collected as cause for concern. Science Curriculum Leader to devise, in consultation with the Science Committee, a Kindergarten to Year 7 plan to systematically teach the content of the <em>Australian Curriculum</em> (science understanding, science inquiry skills, and science as a human endeavor) using the revised <em>Primary Connections</em> resources repurposed to align with the content, capabilities and priorities of the <em>Australian Curriculum</em> at each year level, and the <em>Planting the Seeds of Science</em> resource. Whole-school plan to articulate the content to be taught each term in: Biological Sciences; Chemical Sciences; Earth and Space Sciences; and Physical Sciences. Plan to consider multi-age classes.</td>
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<td>Science Curriculum Leader Teachers</td>
<td>Science Curriculum Leader to be provided with time as needed for mentoring and coaching support</td>
<td><em>Primary Connections</em> resources, <em>Planting the Seeds of Science</em> resource, 2 days teacher relief (TR) @$1 000 per day = $2 000 for the Science Curriculum Leader and Science Consultant to plan</td>
<td>A Kindergarten to Year 7 plan to systematically teach the content of the <em>Australian Curriculum</em> using the revised <em>Primary Connections</em> resources and <em>Planting the Seeds of Science</em> is developed</td>
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<td>Kindergarten teachers K-Year 2 teachers</td>
<td>Teacher shared drive has plans suitable for kindergarten with literature based motivation for the units</td>
<td>Content in Kindergarten is aligned to <em>Planting the Seeds of Science</em> and portal resources. K-2 practice is aligned to the <em>EYLF</em></td>
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<tr>
<td>Teacher Science Curriculum leader</td>
<td>2x teacher relief days @$1 000</td>
<td>Improvement in average WAMSE score</td>
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<tr>
<td>Teacher WAMSE item analysis or Brightpath</td>
<td>Teaching and learning programs have a strong focus on areas identified as cause for concern</td>
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2x teacher relief days @$1 000 = $2 000
### STRATEGIES

1. **Teachers to improve the accuracy of student reporting data by:** collecting valid and reliable assessment information over time across a range of contexts (see *Primary Connections* assessment resources); using the Department’s reporting exemplars; and through analysis of system performance information, including WAMSE.

2. **Refine performance management practices to include focused self-reflection in relation to the teaching of Science and the setting of challenging but realistic goals for improvement.** A quality professional learning program aligned to performance management and catering for the needs of the whole staff, identified groups and individuals to be established.

3. **Continue to purchase consumable resources for *Primary Connections*.** An Education Assistant to be employed to complete purchasing and resource collation into kits. Purchase digital resources as they are released.

4. **Continue to develop relationships with outside agencies e.g.** CSIRO Scientists in School Programme and Earth and Space Sciences Western Australian (ESSWA).

### RESPONSIBILITIES

- Principal
- Teachers
- Deputy Principals
- Science Curriculum Leader
- Science Committee

### RESOURCES

- Reporting exemplars
- Resource purchase – $1 000

### MONITORING/2015 MILESTONES

- Reporting data indicates a close alignment between teacher judgement and WAMSE performance
- Performance Agreements indicate a focus on improving Science practice
- Evidence-based resources aligned to school planning are purchased