



# *The Arundel State School Curriculum Framework*



*'Putting Students 'First'*



# **The Arundel State School**

## **Whole School Curriculum Plan**

*'Soaring to Greater Heights'*

<b>Our Shared Vision</b>	<b>4</b>
<b>Quality Teaching Programs</b>	<b>5</b>
<b>Our Curriculum Framework</b>	<b>6</b>
<b>Pedagogical Framework</b>	<b>7</b>
<b>Curriculum Organisation</b>	<b>11</b>
<b>Monitoring and Reporting</b>	<b>13</b>
<b>Planning</b>	<b>15</b>
<b>Assessment</b>	<b>16</b>
<b>Student Improvement Agenda</b>	<b>19</b>
<b>Cognitive Domains</b>	<b>21</b>
<b>Higher Order Thinking</b>	<b>23</b>
<b>Community Partnerships</b>	<b>24</b>
<b>Appendix A – Planning Template</b>	<b>25</b>
<b>Appendix B - Adjustment Sheets</b>	<b>28</b>



## ***Our Shared Vision***



We believe that the role of Arundel State School is to equip our students with the capabilities to make valuable contributions to society, to become active and informed citizens and to meet the complex challenges our students will face in the future.

To do this we need to:

- provide our students with opportunities to explore the knowledge, skills and processes of each of the key learning areas
- foster within the students a curiosity about the world around them
- engage the students in intellectually challenging real world experiences
- build confidence in the students to take risks with their learning
- recognise and celebrate diversity
- provide clear guidelines on what the students are learning and how they will be assessed
- differentiate teaching in order that every student has access to the curriculum
- provide a range of teaching strategies and learning activities to meet the differing learning styles
- provide explicit teaching to scaffold students' learning building on and consolidating prior knowledge
- foster innovative and creative problem solving
- develop critical and objective thinking
- build teaching and learning experiences around the numeracy and literacy demands of today's society

# Quality Teaching Programs

We believe that quality teaching and learning programs are built around the five principles outlined in the P-12 Curriculum Framework.

**1. Quality curriculum maximises each student's educational potential**

We believe that with good teaching and support, every student, given sufficient time, can develop the knowledge, skills and processes needed to achieve at higher levels. We also believe in setting high, yet realistic, expectations for our students.

**2. Learning experiences should help students connect with prior knowledge, skills and processes**

Learning experiences are determined by identifying what the students already know and are able to do. Our teachers provide multiple opportunities for students to learn what is important and worthwhile through a range of teaching strategies that caters for all students over time and in different contexts.

**3. Learning experiences are equitable and inclusive**

Quality teaching and learning programs engage all students in learning experiences. We believe that each student is an individual with unique capabilities that should be maximised and that each student brings with them diverse experiences and knowledge.

**4. Teaching, learning and assessment are aligned**

We believe that the designed teaching and learning experiences reflects the intended curriculum and that what is assessed is reflected in what is taught.

**5. Learning experiences promote depth of understanding and are connected, purposeful and challenging**

Learning experiences should challenge the students intellectually and make connects with what students already know and can do. All learning experiences should be purposeful, relevant and stimulate the students.

We believe that through intellectually challenging our students we are able to support deep understandings.

# Our Curriculum Framework

The Arundel State School's Curriculum Framework (P-6) is guided by the following departmental policy statements:

1. *To provide a curriculum to maximise the capacity of all students to attain the achievement standards of the National Curriculum*
2. *Monitor and assess individual student achievement and evaluate it against state-wide and national standards, regularly using collaborative processes to support teachers in making consistent judgements.*
3. *Implement school assessment tasks ....., and administer nationally prescribed assessments.*
4. *Regularly report relevant information to parents on student achievement and learning.*

## **Our school curriculum includes:**

- The planning of Prep to Year 6 curriculum so that students have multiple opportunities to achieve and consolidate the achievement level statements of the Australian Curriculum Assessment and Reporting Authority (ACARA), and the end of year junctures in the dimensions of the Essential Learnings.
- The teaching of the learning areas of English, Mathematics, Science, HASS, Technology, The Arts and Health and Physical Education in Prep to 6.
- The teaching of LOTE for the students in Years 4 to 6
- The planning processes to be carried out in consultation with the school community.
- An annual review of whole-school literacy planning, implementation and evaluation with a focus on the literacy requirements in each of the Learning Areas.
- An annual review of whole-school numeracy planning, implementation and evaluation with a focus on the numeracy requirements in each of the Learning Areas.
- The embedding of Aboriginal and Torres Strait Islander perspectives.
- A program for the students identified as gifted and talented as outlined in the *Framework for Gifted Education*
- An inclusive program for the students identified as needing special support.
- Modifications to learning outcomes to be included in an Individual Curriculum Plan
- The integration of ICT (information and communication technologies) in all aspects of the curriculum to enhance student learning.
- A range of assessment tools and processes to monitor each student's learning development.
- Responding to each student's achievements with explicit and targeted teaching.
- Using data from a range of sources to inform planning and teaching (e.g. data from NAPLAN, student semester reports, standardised testing and school based assessments)
- Using agreed standards of student achievement to make judgements – related to the achievement standards of the National Curriculum
- Administrating the National Assessment of Literacy and Numeracy (NAPLAN) tests in Years 3 and 5.
- Conducting regular moderation of common year level assessment tasks using standards based on criteria formed at the onset of year level planning.
- Making judgements of student achievement based on a five-point scale.
- Reporting to parents using a formal written report twice yearly.

# Pedagogical Framework

At Arundel State School we believe our teaching practices must be centred on the learning needs and interests of every student. As such *The Art and Science of Teaching* by Robert J Marzano is the framework adopted as it focuses on student outcomes and highlights how to optimise learning by ensuring students: receive meaningful feedback; get effective content instruction; and have their basic psychological needs met.

Within The Art and Science of Teaching (ASOT) sits a general framework with three categories - Feedback, Content and Context.

'*Feedback* refers to the information loop between the teacher and the students that provides students with an awareness of what they should be learning and how they are doing.

*Content* refers to lesson progression, which allows students to move from an initial understanding of content to application of content while continuously reviewing and upgrading their knowledge.

*Context* refers to the following student psychological needs: engagement, order, a sense of belonging, and high expectation.'

*The New Art and Science of Teaching (Marzano, 2017, p6)*

Embedded within these three categories are ten design areas and design questions that help teacher plan units and lessons.

	Design Areas	Design Questions
Feedback	1. Providing and communicating clear learning goals	How will I communicate clear learning goals that help students understand the progression of knowledge they are expected to master and where they are along that progression?
	2. Using Assessments	How will I design and administer assessments that help students understand how their test scores and grades are related to their status on the progression of knowledge they are expected to master?
Content	3. Conducting Direct Instruction Lessons	When content is new, how will I design and deliver direct instruction lessons that help students understand which parts are important and how the parts fit together?
	4. Conducting Practicing and Deepening Lessons	After presenting content, how will I design and deliver lessons that help students deepen their understanding and develop fluency in skills and processes?
	5. Conducting Knowledge Application Lessons	After presenting content, how will I design and deliver lessons that help students generate and defend claims through knowledge application?
	6. Using Strategies That Appear in All Types of Lessons	Throughout all types of lessons, what strategies will I use to help students continually integrate new knowledge with old knowledge and revise their understanding accordingly?
Context	7. Using Engagement Strategies	What engagement strategies will I use to help students pay attention, be energised, be intrigued, and be inspired?
	8. Implementing Rules and Procedures	What strategies will I use to help students understand and follow rules and procedures?
	9. Building Relationships	What strategies will I use to help students feel welcome, accepted, and valued?
	10. Communicating High Expectations	What strategies will I use to help typically reluctant students feel valued and comfortable interacting with me and their peers?

*The New Art and Science of Teaching (Marzano, 2017, p6-7)*

## **Curriculum Intent**

The curriculum is planned following the mandated curriculum using a three-tiered system.



As the curriculum is refined through the above tiers teachers develop a plan for the delivery of the identified curriculum to ensure that all students have the opportunity to be engaged in meaningful learning.

The Curriculum Intent in each classroom starts with the teacher's understanding of their students' learning needs. Decisions are then made about what the students need to learn.

**Learning starts at the student's entry level.**

## **Assessment**

'Assessment is the purposeful, systematic and ongoing collection of information as evidence for use in making judgments about student learning.'

Principals, teachers and students use assessment information to support improvements in student learning. Assessment information is also used in related systems. In addition, feedback from evaluation of assessment data helps to determine strengths and weaknesses in students' understanding.'

Source: <https://www.learningplace.com.au/deliver/content.asp?pid=49270>

Arundel State School forms judgements about student learning using the three approaches to assessment (Lorna Earl, 2003): *Assessment for Learning*, *Assessment as Learning* and *Assessment of Learning*. (See Assessment for further details)

Productive assessments provide valid and dependable information.

## **Sequencing Teaching and Learning**

'The relationship between what is taught and how it is taught is critical in maximising student learning.'

It is important to find out what your students already know and to set goals for the next steps for learning.'

Source: <https://www.learningplace.com.au/deliver/content.asp?pid=49271>

**Learning starts at the student's entry level.**

The sequence of teaching and learning must always start with the students. Considerations need to be given to how the students learn best. Questions need to be asked around how each student:

- ✓ best receives information;
- ✓ best processes information;
- ✓ best makes progress;
- ✓ best demonstrate their learning; and
- ✓ accesses a type of information best.

A variety of teaching strategies must also be considered for successful learning to occur. These are outlined below.

Teaching Strategy	Definition	Methods
Direct Teaching	Highly structured	<ul style="list-style-type: none"> <li>▪ explicit teaching</li> <li>▪ intensive teaching</li> <li>▪ structured overview</li> <li>▪ drill and practice</li> </ul>
Interactive Teaching	Students working collaboratively and productively in active, hands-on and participatory learning	<ul style="list-style-type: none"> <li>▪ whole-class discussion</li> <li>▪ cooperative learning</li> <li>▪ peer partner learning</li> </ul>
Indirect Teaching	Learner-centred. Students are given the opportunity to make decisions and choices about their learning	<ul style="list-style-type: none"> <li>▪ inquiry-based learning</li> <li>▪ inductive teaching</li> <li>▪ problem-based learning</li> <li>▪ independent learning.</li> </ul>
Experiential Teaching	Students learning from experiencing real, simulated or dramatised situations	<ul style="list-style-type: none"> <li>▪ field experience</li> <li>▪ simulation</li> <li>▪ role play</li> <li>▪ process drama</li> </ul>

Differentiation plays an important role in determining the sequence of teaching and learning and will only occur when the teacher completes formal and informal assessment and gains an understanding of each of his/her students.

### **Making Judgements**

‘Teachers and students use standards to make judgments about the quality of learning based on the available evidence. The process of judging and evaluating the quality of performance and depth of learning is important to promoting learning.

Teachers make judgments against specified standards on evidence from multiple sources. Assessment helps them to make judgments and to inform the next steps for learning.’

Source: <https://www.learningplace.com.au/deliver/content.asp?pid=49272>



Teachers need to ensure the following occurs when making judgements.

1. Attain a shared understanding and teacher agreement across year level about achievement standards and descriptors
2. Be clear and explicit about how judgements are going to be made to the students
3. Develop exemplars to illustrate what levels are expected and share these with the students
4. Be clear in descriptors of achievement levels and share these with the students
5. Teach students to use criteria/judgement sheets to plan, develop and review their own progress
6. Monitor student progress to ascertain student knowledge, strengths, weaknesses, misconceptions, future directions and differentiation needs
7. Moderation occurs involving professional teacher dialogue to align achievement levels.

### **Feedback**

'Feedback is information and advice provided by a teacher, peer, parent or self about aspects of someone's performance. The aim of feedback is to improve learning.

Teachers and students use feedback to close the gap between where students are and where they aim to be. Teachers use self-feedback to guide and improve their teaching practice.'

Source: <https://www.learningplace.com.au/deliver/content.asp?pid=49269>

Classroom activities and assessment is used to gather evidence about:

1. Teacher direction – What do students need to do and be able to do? What needs to change in my next lesson? Was the last lesson effective?
2. Student successes – What is the current level of achievement?
3. Future directions – What do the students need next?

Feedback needs to:

- ✓ be timely, ongoing, instructive and purposeful
- ✓ be focused on the task not the student
- ✓ be constructive – guiding students to future learning
- ✓ challenge and direct student learning
- ✓ allow for the responsibility of individual learning and goal setting

Feedback can be:

- ✓ written, spoken or non-verbal
- ✓ formal or informal
- ✓ given during an activity or following a student's response to an activity/assessment task.

Feedback involves:

- ✓ partnerships between parents, teachers and students
- ✓ students engaging in self-feedback, peer-feedback and teacher-feedback
- ✓ teachers engaging in self-feedback, peer-feedback, student-feedback and parent-feedback

# Curriculum Organisation

At The Arundel State School our curriculum is defined by year levels and terms. Learning areas are to be taught as pure disciplines and underpinned by the general capabilities – literacy, numeracy, ICTs, critical and creative thinking, personal and social capability, ethical understanding and intercultural understandings.

The Arundel State School plans curriculum around the 8 Key Learning Areas (KLA): English, Mathematics, Science, Humanities and Social Sciences, Health and Physical Education, Technology, The Arts and LOTE.

It is important to ensure the integrity of the discipline of each KLA is adhered to; however there are opportunities to integrate across the learning areas. Literacy, Numeracy and Information Communication Technology are an integral part of all Key Learning Areas.

Indigenous Perspectives have been embedded in the National Curriculum (ACARA) and as such will form part of our school curriculum. These perspectives acknowledge the viewpoints of indigenous people within local, regional, national and global contexts.

## Time Allocations

We plan our units based on student and staff interests which are aligned to the Australian Curriculum. Time allocations are dependent on the complexity and design of tasks including cross-curricular unit design.

### **ACARA recommendations**

<b>KLA</b>	<b>Years 1-3</b>	<b>Years 4-6</b>
<b>English</b>	<b>7 hours per week</b>	<b>6 hours per week</b>
<b>Mathematics</b>	<b>5 hours per week</b>	<b>5 hours per week</b>
<b>Science</b>	<b>1 hour per week</b>	<b>1.75 hours per week</b>
<b>HASS</b>	<b>1 hour per week</b>	<b>1.5 hours per week</b>

The following time considerations are also included:

Assembly: 1 hour per fortnight

Inter-school sport: Years 4, 5, 6 - Term 2 (4 x Monday afternoons)

The Arts (Music/Dance/Drama) - ½ hour per week (all year levels)

HPE - ½ hour per week (all year levels)

Digital Technologies (Prep – Year 1) – ½ hour per week  
(Years 2-6) – 1 hour per week

LOTE (Years 4) – ½ hour per week  
(Years 5-6) – 1 hour per week

### ***Curriculum Planning Documents***

The Australian Curriculum is used in the organisation of the curriculum and is the basis of year level and classroom planning:

-

The Arundel State School Documents

- Literacy Companion
- Spelling Program
- Mathematics Program
- Differentiation Policy

Teachers in year levels are expected to plan cooperatively and time is set aside each term for planning.



## *Monitoring and Reporting*

### ***Monitoring***

At the onset of planning with year levels, the content, skills and processes of a KLA will be identified as the intended learning and a common assessment task/s will be decided. The common assessment task/s will demonstrate a clear link to the intended learning in a valid and reliable manner. It is the expectation of The Arundel State School that each unit's assessment task/s be intellectually rigorous and demonstrate one or more of the higher order thinking skills -creating, evaluation and analysing.

Students at The Arundel State School will be assessed according to the assessment schedule in the year level unit planning. It is expected that the students will be assessed a number of times during a unit of work, both formally and informally. Student progress in the intended learning will therefore be monitored by the teachers making assessments and by the students themselves through feedback by the teachers.

Judgements of student work or assessment tasks will be made through criteria sheets common across the year level. These criteria sheets will clearly outline the standards of a KLA with achievements awarded as A to E. At the end of the unit of teaching and learning, moderation of students' work will take place with teachers engaging in professional conversations about the levels of achievement.

Student work samples will be kept by the classroom teachers to demonstrate their knowledge and understanding, skills and/or processes. Work samples should be placed in a student's portfolio.

Students at The Arundel State School will also be assessed at the beginning of the school year and again at the end of the school year using a combination of standardised tests. The purpose of these tests is to gather data on the students and how well they have progressed throughout the year.

## Reporting

Reporting to parents will take place as follows:

<b>Term 1</b>	<b>Term 2</b>	<b>Term 3</b>	<b>Term 4</b>
<b>Parent Information Night</b>  <b>Formal Parent/Student/Teacher Interview</b> End of Term 1 – to discuss behaviour and settling in	<b>Interim Report – Prep</b>  <b>Semester 1 Report:</b> Academic Achievement, Effort and Behaviour	<b>NAPLAN report</b> for Years 3 and 5 in Literacy and Numeracy  <b>Parent/Student/Teacher interview</b> – to discuss Semester 1 report early in Term 3	<b>Semester 2 Report:</b> Academic Achievement, Effort and Behaviour

In the Years P – 6 formal written reports, overall achievement in each learning area studied is reported by grades awarded using the following 5 point scale.

In Prep – the 5 point scale is: Applying, Making Connections, Working With, Exploring, Becoming Aware

In Years 1 – 2 the 5 point scale is: Very High, High, Sound, Developing, Support Required.

In Years 3 – 6 the 5 point scale is: A – E.

# Planning

Learning programmes guide detailed planning and review and provide a record of student developmental learning in the school.

Programmes in this school will be informed by the following:

- ✦ ACARA standards
- ✦ Year Level Overviews
- ✦ School planning documents
- ✦ Teacher and student interests
- ✦ Assessment schedules
- ✦ Moderation Tasks
- ✦ C2C resources

For programmes to be effective, they should consist of learning activities which:

- are sequenced developmentally so that each student experiences a high degree of success,
- build self-confidence and risk taking in the students, and
- encourage the students to self reflect on their individual achievements and learning progress.

The coherence of any programme is evident in planned units, its sequence both within a year and across the years of schooling. This coherence depends upon the identification of appropriate ways to organise learning within units of work. At Arundel State School teachers plan co-operatively and plan to current syllabus documents as per QCCA, Education Queensland and ACARA guidelines.

In planning effective units of work, teachers should:

- provide clear, achievable links to the Australian Curriculum
- determine the processes and skills needed to achieve these links
- provide a balanced content
- establish a common framework for assessment through an intellectually rigorous final task (including a task description, parameters and common marking criteria)
- allow for flexibility
- provide relevant, authentic activities that engage the students
- include a variety of assessment techniques that informs the teachers of student progress and future learning opportunities
- take previous assessment results into account
- cater for differences and diversity through a variety of activities and approaches.

At the end of each unit of work a review will be made by individual teachers.



# Assessment

Planning and assessment go hand in hand – one influencing the other. The result of previous assessment will influence part of the content for the next unit of work. How, what and when assessment will occur in the unit of work will be decided in the planning stages and linked to specific activities being incorporated into the unit so that real outcomes can be achieved and monitored.

Assessment is a purposeful process in which observations of children are made and their responses to tasks and activities obtained in order to make judgements and decisions about the quality of children's learning and their levels of attainment. Judgements are made by comparisons with stated criteria. Assessment should have a clear purpose and be beneficial to both the participant (student) and those with a legitimate interest in it.

Assessment should:

- be purposeful
- benefit children
- be in harmony with current knowledge about child development
- be efficient
- develop children's capacity to become active and effective self-assessors
- be socially just and equitable

Assessment of student's growth and development needs to match the teacher's knowledge of how children learn. The assessment should be used to:

- gain a better understanding of children
- gain insights in how children think and learn
- match teaching more closely to children's needs
- maintain the continuity of children's experiences within and across year levels
- guide decisions by teachers about the curriculum
- report on children's current educational status to those with a legitimate interest in their education.

Over time student's use and knowledge of language is assessed to determine their:

- ability to participate in specific genres and social contexts
- attitudinal learning about themselves, other people and language
- imaginative and logical thinking processes
- skills in deploying and interpreting language features and in using communicative procedures, learning procedures and strategic procedures
- knowledge about language and their own learning.

Teachers assume many different roles for the purposes of assessment. These can be seen below.

### **Assessment Roles and Goals**

<i>Role</i>	<i>Goal</i>
Teacher as mentor	Provide feedback and support to each student.
Teacher as guide	Gather diagnostic information to lead the group through the work at hand.
Teacher the accountant	Maintain records of students' progress and achievement.
Teacher as reporter	Report to parents, students, and the school administration about student progress and achievement.
Teacher as program director	Make adjustments and revisions to instructional practices.

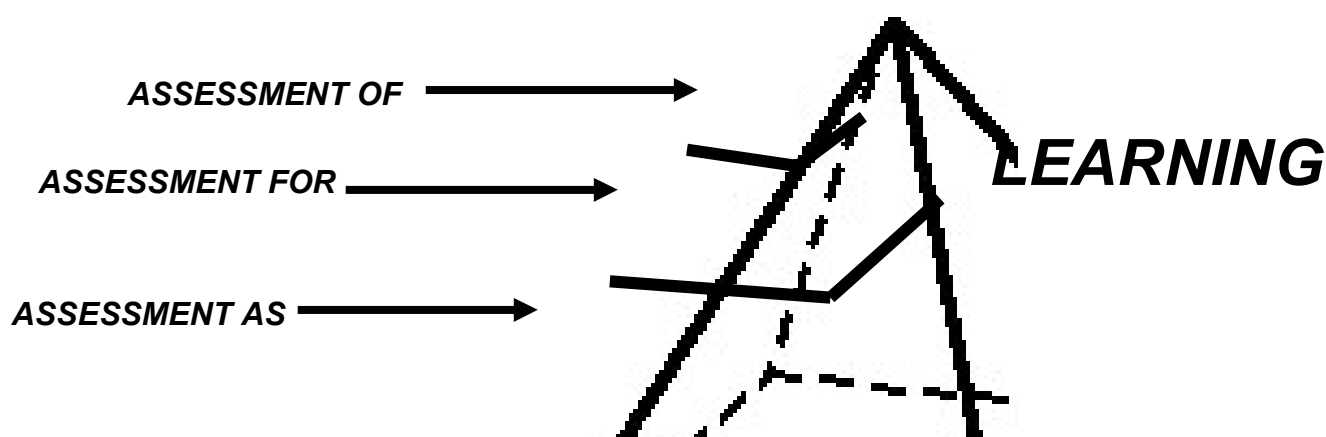
SOURCE: Adapted from Assessment Roles and Goals (Wilson, 1996)

The Arundel State School subscribes to the three approaches to assessment: Assessment *for* Learning, Assessment *as* Learning and Assessment *of* Learning. (Lorna Earl, 2003) The table below briefly outlines these three approaches to assessment.

#### **Features of Assessment of, for and as Learning**

<i>Approach</i>	<i>Purpose</i>	<i>Reference Points</i>	<i>Key Assessor</i>
Assessment <i>of</i> Learning	Judgements about placement, promotion, credentials, etc	Other students	Teacher
Assessment <i>for</i> Learning	Information for teachers' instructional decisions	External standards or expectations	Teacher
Assessment <i>as</i> Learning	Self-monitoring and self correction or adjustment	Personal goals and external standards	Student

### **Assessment Pyramid**



The major focus of the pyramid is on classroom assessment that contributes to student learning, by the teacher (for learning) and by the student (as learning).

The following is list of example assessment tasks and how they relate to the school 'Assessment for, Assessment as, and Assessment of' model.



<b>Assessment</b>	<b>for, as, of</b>
1. Maths pretest of addition and subtraction knowledge	for
2. Draft of narrative writing	as
3. Oral presentation of information report	of
4. Reflections on the unit of study	of
5. KWL (Completing K & W)	for
6. Running records	for/of
7. End of term maths assessment	of
8. Observations of group work	as
9. Checklist of science observations	as
10. Interview with student	as
11. Conferencing writing tasks	as
12. Learning journal tracking understanding	as
13. Art portfolio	of
14. Worksheets from activities	as
15. Standardized test – Waddington Spelling	for/of
16. Holborn reading test	for/of
17. Technology design Log	as
18. Rehearsals of drama performance	as

# Student Improvement Agenda

School based assessment data, systemic assessments (NAPLAN) and standardised testing informs teachers of not only individual student strengths and areas for improvement but year level and whole school trends. From a focused analysis of the data, in year level groups, cohort groups and as individual teachers, school targets for student improvement are identified in literacy and numeracy.

Student improvements occur when the learning needs of all students are met (having been identified from data analysis) and when teachers have high expectations for all students. At The Arundel State School we believe student improvements can be made through 'a curriculum for all' approach rather than a 'one size fits all' strategy.

'A curriculum for all' approach is promoted when:

- ✓ teachers believe all students can learn
- ✓ teachers make no assumptions about prior learning, beginning with what students currently know rather than what they should know
- ✓ learning environments are established that value and respond to diversity
- ✓ the use of a range of resources that are appropriate to students' learning needs
- ✓ the relationships and behaviour between students and between students and teachers are fair and respectful.

'A curriculum for all' approach is ensured through:

- ✓ the intended curriculum for all students based on mandated curriculum documents
- ✓ teaching using a range of strategies to support the productive pedagogies of intellectual engagement, connectedness, supportive classroom environments and recognition of difference
- ✓ assessment tasks that enable all students to demonstrate their learning through a variety of modes and technologies.

(P-12 Curriculum Framework p10)

We also cater for 'a curriculum for all' approach through the consideration of the differing learning styles outlined in Gardner's Multiple Intelligences, through Bloom's Revised Taxonomy and Edward De Bono's thinking hats and skills when planning and developing assessment tasks. This is further elaborated in the school Differentiation Policy.

### ***Improving Student Learning***

Improving student learning in the identified school improvement targets involves the following three approaches:

#### ***1. Explicit teaching for all students***

After analysis of whole-school achievement data and identifying trends in student achievement across the school population, we respond with focused and explicit teaching. The explicit teaching will be monitored by reviewing student achievement data collected from student work samples, tests and/or assessment items.

#### ***2. Targeted teaching***

If the explicit teaching by the classroom teacher and the multiple opportunities to learn are not resulting in improvements of the targets, additional targeted teaching is provided. This usually involves the collaboration of other teaching staff.

#### ***3. Intensive collaborative teaching***

When a small group of students do not respond to targeted teaching a more intensive teaching method is provided in the critical areas. This method involves the collaboration of other teaching staff.

These three approaches to improving student learning are modelled through our learning support programs and intervention strategies.

# Cognitive Domains

At Arundel State School we scaffold learning activities and assessment tasks to allow the students to demonstrate their level of cognitive domain. These six domains are identified in the revised taxonomy of intellectual behaviour devised by Anderson and Krathwohl in 2001 based on the work of Benjamin Bloom in 1956. The six levels of cognitive domain are explored below – three lower order thinking skills and three higher order thinking skills.

## Higher Order Thinking Skills

**CREATING:** Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.

**EVALUATING:** Making judgments based on criteria and standards through checking and critiquing.

**ANALYZING:** Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.

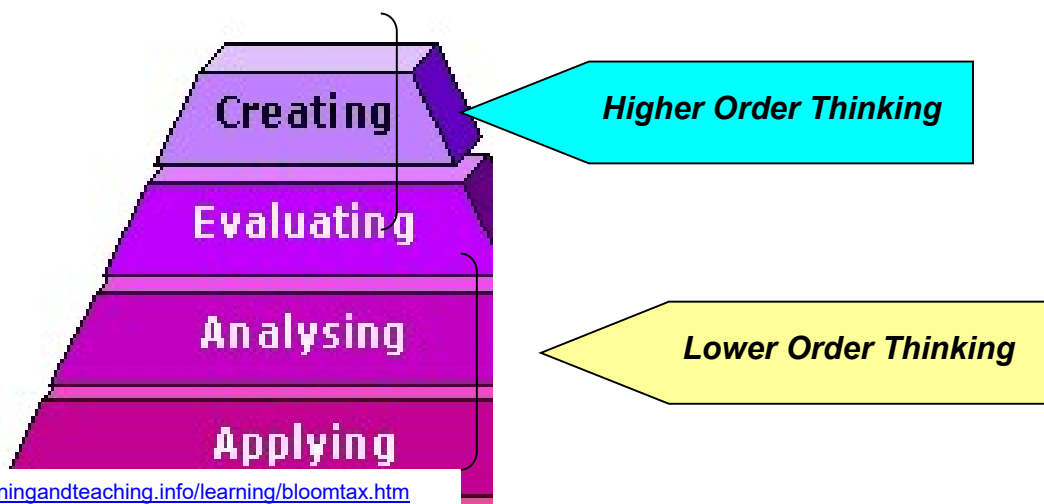
## Lower Order Thinking Skills

**APPLYING:** Carrying out or using a procedure through executing, or implementing.

**UNDERSTANDING:** Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.

**REMEMBERING:** Retrieving, recognizing, and recalling relevant knowledge from long-term memory.

(Anderson & Krathwohl, 2001, pp. 67-68) as sourced from <http://www.learningandteaching.info/learning/bloomtax.htm>



The Cognitive Domains can be further explained through the following table.

<b>Level of Cognitive Domain</b>	<b>Verbs</b>	<b>Products Examples</b>
<b>Creating</b> – <i>Create new</i>	change, combine, compose, create, design, formulate, hypothesize, improve, invent, predict	puppet show, cartoon, skit, book cover, multi-media, new game, poem
<b>Evaluating</b> – <i>Defend concept or idea</i>	appraise, defend, dispute, editorialize, judge, justify, prioritize, rate, select, support, verify	critique, judgement, opinion, recommendation, report, self-evaluation
<b>Analyzing</b> – <i>Distinguish different parts</i>	appraise, compare, contrast, differentiation, distinguish, examine, infer, outline, sequence, test	chart, plan, questionnaire, spreadsheet, summary, survey
<b>Applying</b> – <i>Use information in new ways</i>	classify, demonstrate, dramatise, illustrate, practice, solve, use	collection, interview, model building, presentation, role playing, scrap book, simulation
<b>Understanding</b> – <i>Explain information or concepts</i>	calculate, describe, discuss, expand, explain, identify, locate, outline, report, restate	drawing, paraphrasing, peer teaching, show and tell, story problems, summary
<b>Remembering</b> – <i>Remembering information</i>	define, duplicate, list, name, recall, reproduce, tell, underline	definitions, fact charts, lists, recitations, worksheets

Source: [http://projects.coe.uga.edu/epltt/index.php?title=Bloom%27s\\_Taxonomy#end](http://projects.coe.uga.edu/epltt/index.php?title=Bloom%27s_Taxonomy#end)

# Higher-Order Thinking

*He who learns but does not think is lost.*

**Chinese Proverb**

Higher order thinking lessons, activities and assessment tasks allow for the development of skills in problem solving, thinking critically, thinking creatively, making decisions, analysing and evaluating information and planning for the future. All of these skills are needed by our students and should be provided within a range of learning content and in a range of contexts.

***The best teachers are those who equip students to THINK for themselves.***

'Higher-order thinking by students involves the transformation of information and ideas. This transformation occurs when students combine facts and ideas and synthesise, generalise, explain, hypothesise or arrive at some conclusion or interpretation. Manipulating information and ideas through these processes allows students to solve problems, gain understanding and discover new meanings. When students engage in the construction of knowledge, an element of uncertainty is introduced into the instructional process and the outcomes are not always predictable; in other words, the teacher is not certain what the students will produce. In helping students become producers of knowledge, the teacher's main instructional task is to create activities or environments that allow them opportunities to engage in higher-order thinking.'

(Department of Education, Queensland, ***A guide to productive pedagogies: classroom reflection manual***, 2002, p. 1)

At Arundel State School we believe each classroom to be one that encourages and develops thinking. This occurs through the concept of the '*Thinking Classroom*'. Our thinking classrooms provide opportunities for:

- ◀ higher order thinking;
- ◀ complex problem solving; and
- ◀ open ended problems/questions.

All thinking skills are **explicitly** taught in an authentic and meaningful context.

## **Creating**

**Generating new ideas, products, or ways of viewing things  
Designing, constructing, planning, producing, inventing.**

## **Evaluating**

**Justifying a decision or course of action  
Checking, hypothesising, critiquing, experimenting, judging**

## **Analysing**

**Breaking information into parts to explore understandings and relationships  
Comparing, organising, deconstructing, interrogating, finding**

## Community Partnerships

At The Arundel State School we celebrate and inform our community about our learning through:

<b>School Governance</b>	<b>Communication</b>	<b>Celebration</b>
<ul style="list-style-type: none"> <li>❖ Parents and Citizens</li> <li>❖ School Annual Report</li> <li>❖ School Annual Operational Plan</li> <li>❖ Triennial School Review</li> <li>❖ Parent Forums</li> <li>❖ Parent Volunteers</li> <li>❖ School Council</li> </ul>	<ul style="list-style-type: none"> <li>❖ School Newsletter</li> <li>❖ Website</li> <li>❖ Parent Information Nights</li> <li>❖ Two formal Report Cards (<i>Term 2 and 4</i>)</li> <li>❖ Invitation for parent interviews</li> <li>❖ Invitation for class showcases</li> <li>❖ Parent Interviews (<i>Term 1 and Term 3</i>)</li> <li>❖ Class newsletters</li> <li>❖ Open Days and Nights</li> <li>❖ Virtual Classrooms</li> <li>❖ Email</li> </ul>	<ul style="list-style-type: none"> <li>❖ Under 8's day</li> <li>❖ Sporting Carnivals</li> <li>❖ Weekly Assemblies ANZAC Day</li> <li>❖ Book Fairs</li> <li>❖ Literacy / Numeracy Week</li> <li>❖ Music Information Night</li> <li>❖ Eisteddfod Performances</li> <li>❖ Community Music Performances</li> <li>❖ Year 6 Graduation</li> <li>❖ School Fete</li> <li>❖ Student Awards</li> <li>❖ Classroom Events</li> <li>❖ Special Events for recognition of excellence in behaviour</li> <li>❖ Special Events for recognition of sporting achievements</li> <li>❖ Christmas Carols Night</li> <li>❖ NAIDOC Week</li> <li>❖ Science Week</li> <li>❖ Science Expo/Fair</li> <li>❖ Harmony Day</li> </ul>

***Appendix A***  
***Planning Documents***  
***Term Overview Sheets***





**Arundel State School Year Level Planning Overview**  
**Aligning The Art and Science of Teaching**



<b>Year Level:</b>	<b>Subject:</b>	<b>Term:</b>	<b>Teachers:</b>		
<b>Curriculum intent:</b>	<b>Assessment Task/s:</b>			<b>Teaching timeline</b>	<b>Assessment task timeline</b>

**Demands of the Assessment Task**

<b>What must the students know and understand to complete the task?</b>	<b>What skills must the students have to complete the task?</b>	<b>What does the assessment task look like?</b>	<b>What are the parameters of the task?</b>
---	---	---	---

<b>Pre-assessment description:</b>	<b>How will judgements be made?</b>	<b>Feedback opportunities</b>	<b>Moderation timeline</b>
------------------------------------	-------------------------------------	-------------------------------	----------------------------



*Arundel State School Individual Teaching Planning Overview*  
*Aligning The Art and Science of Teaching*



Teacher/s:	Class:	Term:	Subject:
<b>Teaching and Learning Considerations</b>			
Pre-assessment data groupings	Focused Teaching Needs		Considerations to Instruction
<b>Extension</b>			
<b>Core</b>			
<b>Support</b>			

***Appendix B***  
***Adjustment Sheet***  
***Adjustment Considerations***



**Classroom Adjustments for Consideration when Planning and Teaching for Students with Learning Needs (SWLN)**

<b>PLANNING</b>	<b>TEACHING</b>	<b>ASSESSMENT</b>
Plan classroom seating arrangements	Pair student's name with instructions	Alternative assessment using various modes
Plan a quiet place for student/s to work	Support student's attempt to communicate	Development of model rather than written
Minimize visual distractions	Use variety of teaching modes – visual, kinaesthetic	Oral rather than written
Visual work system/aids	Pace lessons to include SWLN	More time assistance
Select appropriate content	Keep directions and verbal instructions short	Assess IEP or support plan goals
Pace lessons planning to suit SWLN	Allow SWLN more 'take-up' time	Different ways demonstrated learning/ opportunities to determine skills and knowledge
Collaborate with support staff/parents	Use visual example to support verbal instructions	Time of day student is assessed
Attend PD to assist with student management	Be specific with requests and cues	Collaboration
Research information about student needs area	Monitor peer relationships	Relevant assessment
Obtain student's IEP or support plan	Use of mentor or peer buddy system for SWLN	Reporting consideration given to student
Large print materials prepared	Encourage students to see positive side of situations	Scribing for assessment tasks
Copies of board work/worksheets prepared	Give student time-out when needed	Teacher/teacher aide support
Cloze exercises set up to replace class notes copied down by class mates	Provide opportunities for work in small groups	Knowledge and understanding assessed at a lower level
Adjusted worksheets prepared	Use student's strengths and interests as motivators for learning	Data monitoring
Preparation of audio tapes or other support materials	Use of scaffolding, sequencing and organisation	Progress monitoring
Visual timetable/clues/colour coding used	Encourage turn taking	Adjusted reporting comments
Teacher aide enlisted to create teaching support materials	Extensive revision (with support personnel)	
	Extra time allocation to complete set tasks	
	One-on-one assistance required	
	Tutorials before and after lessons	