
Achievement Integrated Model: Interventions for Gifted Indigenous Underachievers

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Introduction

Since the mid 1990s, the context of education has changed. Currently, there is an increasingly diverse population of students in our schools and a pronounced emphasis on the need to close educational achievement gaps, especially between those students who have had all of life's advantages and those who have had less than their fair share....not only do gifted education professionals have much to offer in terms of instructional strategies to close the achievement gap, but we also have much to lose if we are not able to work with our colleagues to address another chronic gap: the underrepresentation of culturally diverse and low-income students in gifted education programs. (Tomlinson, Doubet, Capper, 2006, p. 224)

While increasing numbers of Indigenous students are achieving tertiary academic success, statistics show that Indigenous students as a group achieve at rates far below that of other students (Grigg, 2004). Gifted underachieving Indigenous students in particular, represent a high proportion of this population and are disproportionately underrepresented in school programs for the gifted (Braggett, 1985; Chaffey, 2008).

The Achievement Integrated Model (AIM) is a holistic approach to cater for the needs of all underachieving students. It recognises that curriculum differentiation is essential in order to meet the needs of the different ability levels within the regular classroom. However, underachieving Indigenous students may have underlying issues different from other underachievers, which even when presented with differentiated learning, prevent them from reaching their potential. Therefore, to address the underlying causes of their underachievement, in addition to curriculum differentiation, the AIM focuses on identifying and profiling students and designing affective and cognitive interventions specific to their needs.

The achievement integrated model (AIM)

Underachievement may be considered as a subjective rather than objective classification (Reis & McCoach, 2000), and is often dependent upon a teacher's capacity to first, identify a student's potential and then, determine if a discrepancy exists between ability and performance. Therefore, the AIM assists teachers in:

1. identifying Indigenous underachievers and invisible underachievers;
2. profiling these students;
3. planning interventions;
4. selecting and designing curriculum interventions aimed at enhancing their academic self-efficacy;
5. monitoring and assessing the student's progress; and,
6. evaluating the intervention program.

Objectives

For the teacher to:

- Identify the gifted underachievers and 'invisible' underachievers and plan appropriate interventions.
- Cater for the gifts, talents, strengths, interests and learning styles of Indigenous children.
- Design a curriculum that engages the students at their own level of understanding.
- Utilise strategies that enhance academic self-efficacy.
- Provide students with flexible learning opportunities within a supportive learning environment.

For the student with guidance and support to:

- Develop a belief in their ability to complete academic tasks (self-efficacy).
- Develop skills in goal setting, planning and self-monitoring.
- Explain knowledge and understanding of concepts to a variety of audiences.
- Produce quality products that demonstrate their understanding of a concept.
- Have a greater self-awareness of their learning styles and learning needs (metacognition).
- Demonstrate responsibility and initiative in the planning, designing and preparing of learning tasks.

The AIM model is illustrated in Figure 1.

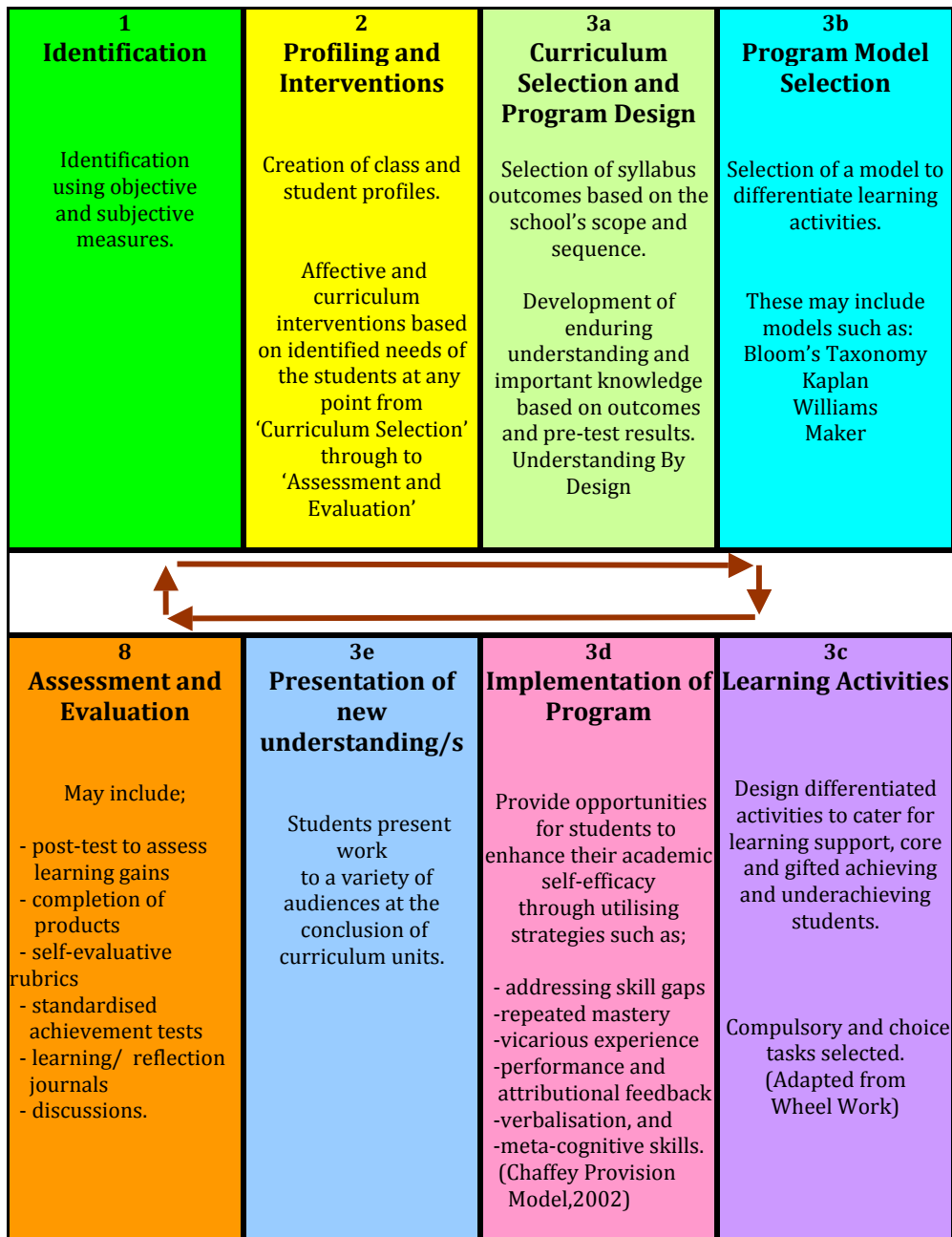


Figure 1. The Achievement Integrated Model Overview

Theoretical framework

Identification

Indigenous students may not be identified when standardised tests or intelligence tests are the main forms of identification and this can result in their test performance being artificially lowered. Tzuriel and Feuerstein (cited in Chaffey, Bailey, & Vine 1992) suggest that this is a direct result of socio-emotional issues and inefficient metacognition, rather than lower cognitive potential. A lack of experience and exposure to enriched environments (Wright & Borland, 1993), both at home and at school, can further lower their scores. For these reasons, such students are “quite likely not to be included in gifted enrichment programs” (Kaniel & Reichenberg, 1990, p. 9). Multiple forms of objective and subjective tools cast “a wide net to find special abilities, and [are] less likely to miss the atypically gifted student” (Borland & Wright 1994, cited in Begoray & Slovinsky, 1997, p. 4). Such measures may provide further insights into the potential of these gifted students (Kolb & Jussim, 1993).

One method used in the AIM for identifying underachieving Indigenous students is the Coolabah Dynamic Assessment, which has been specifically designed to “identify giftedness in individuals who under-perform on one-off tests of cognitive ability” (Chaffey, 2004, p. 12). Indigenous students are often ‘invisible’ underachievers: “individuals whose assessment potential, as indicated by commonly used identification methods, is less than their actual potential and who also underperform in the classroom” (Chaffey, 2004, p. 9). The Coolabah Dynamic Assessment method, which focuses on “both cognitive and socio-emotional factors thought to contribute to underachievement in academic performance” (Chaffey, 2004, p. 13) forms an important part of the AIM identification procedure with this student population.

Profiling and interventions

Individual and class profiles

The second component of the AIM focuses on creating individual and class profiles (see Appendix 1) to assist with the selection of appropriate interventions and curriculum. Individual profiles are a necessary component of this model as underachievement may be caused by a number of factors, such as, “personality traits... family and home characteristics... school and curriculum related variables... a mismatch between student’s learning style and classroom demands... (and) teacher expectations” (Kolb & Jussim, 1994, p. 26). Additionally, Indigenous students may suffer from issues of cultural stereotyping, low expectations (self, family, society), forced-choice dilemma and issues of identity. Therefore, just as there are many different causes for underachievement, there is no one common intervention response (Baum, Renzulli & Hebert, 1995; Reis & McCoach, 2000). Programs used to assist students in avoiding or reversing underachievement, need to be individualised and provide a menu of different options (Reis & McCoach, 2000). The ‘Underachievement Intervention Strategies Table’ (see Appendix 2) in the AIM provides a list of possible intervention strategies to suit different types of underachievers: Indigenous, selective, invisible, and double-labelled gifted students (gifted students with a specific learning disability).

When determining appropriate intervention options for each individual, teachers must consider the student's behaviour, attitudes, self-perception (Grigg, 2004; Ramsey & Ramsey, 2002) and other intrinsic and extrinsic factors which may contribute to underachievement. When profiling Indigenous underachieving students, it is important to "recognise the identities and backgrounds of all students and demonstrate that we value the life experiences they bring to the learning" (Penny & Price, 1999). The use of a number of tools (see Appendix 3), such as 'Identity Web' activities "facilitates the sharing of personal profiles and creates opportunities for sharing common attributes, and character strengths which are relationship-generating possibilities" (Grigg, 2004) (see Appendix 4).

The profiling procedures, outlined in the AIM, focus specifically on analysing the data collected and creating both individual and class profiles (see Appendix 1) and assist with the grouping of students according to their needs, ability and possible causes of underachievement.

Affective interventions

Affective interventions are particularly necessary when working with Indigenous students. After analysing results from the 'Identity Web', issues pertaining to identity may need addressing as "the significance of identity in the growth and development of each individual is of paramount importance within the learning context" (Grigg, 2004).

Affective interventions include strategies for enhancing academic self-efficacy and are embedded into the AIM, as underachieving students often have a poor perception of their ability to succeed in given academic tasks. Academic self-efficacy may be defined as "people's judgements of their capabilities to organise and execute courses of action required to attain designated types of performances" (Schunk, 1991, p. 207). Self-efficacy influences the decisions that individuals make about activity choice and how much effort and persistence they will invest in an activity (Schunk, 1991). Students who have low academic self-efficacy often "expend little effort on difficult tasks. Those who believe they are capable select tasks at which they can succeed, persist longer, and expend effort" (Schunk, 1991, p. 223). Therefore, the three major contributors to self-efficacy, "mastery experiences, vicarious experience and verbal persuasion" (Bandura, 2003 cited in Chaffey, 2005c, p. 30), in addition to verbalisation, are targeted in the implementation of the AIM affective interventions. These strategies are outlined later in this paper.

Some of the affective and cognitive interventions currently being implemented with gifted Indigenous students are detailed in Appendix 5.

Curriculum

"The educational needs of gifted children are best served by classrooms that provide a motivating curriculum" (Goldberg & Cornell, 1998). Rea (2000) described optimal motivation as an experience in which students become absorbed in a task. "They are most likely to experience motivation when...interest and arousal are present. Intrinsic motivation builds the relationship between effort and outcome" (Davis & Rimm, 2004, p. 328). However, prior to underachieving Indigenous students

becoming intrinsically motivated and engaged, the following important issues may need to be addressed:

- low academic self-efficacy;
- the need for higher expectations of self, and by teachers, family and community; and,
- the building of sound relationships with significant others.

The overarching model used in the AIM curriculum is 'Understanding By Design' (UbD) (Wiggins & McTighe, 2005). While the aim of UbD is to create a rigorous and engaging curriculum, initially, the curriculum would need to be modified and simplified to ensure that the underachieving Indigenous students achieve success. Task complexity and challenge is gradually increased as the students become proficient learners.

The following components are essential when designing an engaging curriculum:

- developing an 'enduring understanding' (universal idea) that is transferable across more than one discipline;
- formulating 'essential questions' related to the syllabus outcomes and the 'enduring understanding';
- identifying the concepts (knowledge) needed in order for a student to be able to answer the 'essential questions' (see Appendix 6).

Program model selection

Once the enduring understanding and the important knowledge of a unit are identified, the learning tasks and assessments are then designed using models based on sound pedagogy.

Listed below are examples of models that may be used to differentiate the curriculum:

- Bloom's and Krathwohl's Cognitive and Affective Taxonomies.
- Williams' Cognitive-Affective Interaction Model.
- Kaplan's Content-Process-Product Model.
- Maker Model of Curriculum Development for Gifted Students.

These models facilitate the planning and implementation of curriculum that has a strong focus on deep understandings through which Indigenous students are able to transfer and link concepts. It focuses on skills-based learning rather than content alone.

Quality open-ended tasks allow Indigenous students of different abilities to solve tasks with varying degrees of sophistication and efficiency. However, teachers need to provide modelling and scaffolds to assist students when these tasks are undertaken. The level of support required will depend on the needs of each student.

Learning Activities

Most studies on underachievers reveal a “lack of personal locus of control (as a common characteristic) that is, underachievers do not internalise the relationship between effort and outcome, process and product” (Rimm, 1987, p. 34). Therefore, it is important that students are taught about their own responsibility for their academic success (Ogbu, 1994), and are assisted in seeing the value and possible rewards of high achievement. The AIM curriculum aims to assist students in assuming responsibility for their learning, and initiative in planning, designing and preparing learning tasks. It focuses on developing skills in goal setting, planning and self-monitoring and is achieved through:

- teaching students goal setting techniques;
- having students use learning and reflection logs (Mackay & Hoy, 2002)(see Appendix 7);
- providing skills-based lessons using the Information-Literacy Process (see Appendix 8); and,
- including activities where students design their own learning tasks using the ‘Bloom’s Product Wheel’ (see Appendix 9).

The curriculum intervention may take several years before students are able to produce high-quality products commensurate with their level of potential, and reverse their patterns of underachievement.

The learning activities in the AIM use the enduring understanding and essential questions to link important knowledge, syllabus outcomes and pre-test results. The program model selected by the teacher, for example, Bloom’s, Williams, may be used to design compulsory learning tasks in order to develop a deep understanding of a concept. Upon completion of compulsory tasks, students negotiate choice tasks selected from the Bloom’s Product Wheel. The concept of compulsory and choice tasks is based on the Wheel Work Model (Mackay & Hoy, 2002). The structure of a unit of work will depend on the age group, affective and curriculum needs, ability and readiness of the students.

The Information Literacy Process (ILP) is integrated into the curriculum design and implementation of the AIM to empower students with their learning and assist in the development of metacognitive skills. Many underachieving Indigenous gifted students are lacking in skills of metacognition, which covers:

- Metacognitive controls: “planning, goal setting, selecting strategies, monitoring, using feedback and evaluating results” (Treffinger et al., 1993 cited in Heller et al., 1993, p. 556).
- Metacognitive knowledge: “knowledge about general cognitive strategies, when to use them, conditions when the strategies may be used effectively, and self-knowledge” (Pintrich, 2002, p. 159).

The ILP involves defining the focus of study or research, locating appropriate and reliable information from various sources including books and the Internet, selecting the information needed, organising the information and finally, presenting information in the most effective way. Kuhlthau (1995) maintains that to be literate is not only to recognise when information is required, but also involves the ability to

construct one's own knowledge through a process that gives meaning and self-interest to the notion of learning throughout a lifetime.

Implementation of program

“Due to long-term disengagement in class, the academic skill and knowledge levels of underachievers are often substantially below the student’s real potential. With these students, flow may not be achieved by using task difficulty levels that are matched to perceived ability (i.e. potential) levels” (Chaffey, 2005b, p. 24). Flow, according to Chaffey (2005a), “describes how intrinsically motivated people feel when they are highly engrossed in their focus activity” (p. 21). The task difficulty needs to match the student’s skill level for ‘flow’ to occur. Initially, it is unrealistic to expect gifted underachieving students to be working at the same level and pace as gifted achieving students. The degree of difficulty of the tasks increases gradually as the students achieve success and their skills develop.

To maximise the underachieving student’s experience of mastery and ‘flow’, a number of strategies (Chaffey, 2005a) are employed by the teacher throughout the learning process. These include:

Mastery strategies

- Providing scaffolds as needed to assist in the successful completion of tasks.
- Modelling skills and tasks to assist the students in gaining a clear understanding of expectations.
- Structuring tasks and providing product choices for students using the Wheel Work model.
- Increasing task difficulty by varying the product choices when academic self-efficacy has improved.

Vicarious experience

- Providing opportunities for students to discuss their progress, successes and challenges.
- Varying groups to include individual, pair and small group options paying attention to ability level and interest.
- Allowing students to increase their understandings by observing the work of their peers.
- Using guest speakers and mentors, especially people from Indigenous communities.
- Providing field excursions to work with significant others, such as elders, field experts, scientists, artists.

Verbal persuasion

- Providing opportunities for performance and attributional feedback.
- Using teacher, peer and self-assessments that focus on skills, knowledge gained and achievement of goals.

Verbalisation

- Asking students to explain the strategies, skills and processes used upon the completion of a product i.e. “*Tell me how you did that?*”
- Allowing students to present their work to peers, teachers, parents and relevant field experts. Initially, some students may need to present their work to smaller audiences or have the support of a significant and respected person with them.

Metacognitive skills-based lessons

- Modelling metacognitive processes using skills based lessons.
- Having students monitor their progress, set goals and evaluate results using a 'Learning and Reflection Log' (Mackay & Hoy, 2002).
- Using the Information Literacy Process for students to develop effective self-monitoring skills when researching.

Presentation of new understandings

At the completion of a unit, students are given the opportunity to discuss their new understandings to their peers and present to wider audiences. Students display their work in a variety of innovative ways depending upon their preferences. Presentations to smaller groups are less threatening than standing in front of a larger audience and may be a preferred option for Indigenous underachieving students, students who have low self-esteem, and/or those who exhibit high levels of perfectionism.

Assessment

Assessment 'of' and 'for' learning occurs both formally and informally throughout the AIM and may include:

- pre-tests and post-tests using Bloom's Taxonomy and other models to differentiate questions;
- products, including compulsory and choice tasks;
- final presentation of new understandings;
- ongoing feedback from teacher and peers throughout the unit of work;
- teacher and student rubrics, including 'Achiever's Rubric' (Appendix 10);
- self-assessments in learning and reflection logs with a focus on meta-cognition; and,
- analysing learning gains.

Findings and implications

In trialling the AIM model within the classroom, the authors noted the following findings and implications. Freedom to select and negotiate tasks based on their interests gave the students a sense of ownership, increased autonomy and pride in their work. This approach proved to be particularly successful with boys and catered for a variety of learning styles. The complete list of findings and their implications are presented in the following summary table (Table 1).

Table 1. AIM findings and implications

Findings	Implications
The identification and profiling assisted teachers to better understand student needs, interests and possible causes of underachievement. The use of CDA as part of the identification process enabled the student's learning potential to be more accurately identified and this, in turn, raised teacher expectations.	As stated previously, while students may have a high learning potential, there may be skill gaps and other underlying causes for their underachievement that require targeting. Interventions would then need to be designed and administered.
The inclusion of the 'Identity Web' activity when profiling Indigenous underachieving gifted students provided valuable information.	Issues pertaining to identity may need to be addressed, as the significance of this in the growth and development of the individual is important within the learning context.
The AIM enabled teachers to streamline the planning and programming process. The use of UbD assisted teachers to design focused learning activities linked to the syllabus outcomes.	In order to differentiate the curriculum, teachers require training to familiarise themselves with UbD and other models. There needs to be ongoing professional development for this to be successful.
The learning and reflection log and teacher-student conferences supported underachieving students in developing organisational and metacognitive skills. Throughout the conference, the teachers gained information about the student's knowledge and understandings, and enabled them to give feedback specific to the tasks and level of mastery. Conferencing was a valuable informal assessment tool for the students who had not performed to expectations in traditional assessment methods.	Teachers need to take an active role in facilitating student learning and allow time for conferencing.

Findings	Implications
Initially, student products did not meet teacher expectations. However, they were true reflections of what the student could produce independently at that time. Self, peer and teacher performance feedback assisted students in evaluating and modifying the processes used and products created. It enabled them to raise their expectations of themselves and offered a wider variety of options to help them improve their future work.	Opportunities to verbalise and share understandings with a variety of audiences provides valuable vicarious experiences for the students to learn from each other's challenges and successes.
The daily mathematical intervention for Indigenous students resulted in significant improvements in numeracy results. Gifted underachieving students, in particular, benefited from this form of intervention as it provided an opportunity for students to enhance their academic self-efficacy in mathematics and fill skill gaps. It also prepared students for eventual inclusion in gifted mathematics classes. One student has been able to join the gifted mathematics group after completing several terms in the intervention program. Three other Indigenous students are being monitored and will probably be able to join the gifted class next year.	The use of a teacher who was respected by the students assisted in the large academic gains. The program worked best when the students attended on a daily basis. The intervention was a necessary step for underachieving students, as it provided a safe environment where skill gaps could quickly be addressed.
Interest based learning such as robotics has proven itself to be a very effective tool in increasing the motivation of identified Indigenous underachievers. The success students are experiencing in Robotics has enhanced academic self-efficacy and engagement. The robotics lunch club and whole class program has provided a link between 'fun' interest areas (robotics and technology) and academic areas (literacy and numeracy).	The use of a teacher who was respected (significant other) by the students assisted in developing a safe environment where the students were willing to take risks and become peer tutors and leaders in robotics. Robotics needs to be integrated slowly into the curriculum and students need opportunities to create their own challenges.

Findings	Implications
<p>Mentoring for the Future/ Career Education Program. “The mentoring program has been an outstanding success, with each student matched to a mentor to plan their direction towards a chosen career” (Howard, cited in Zebec (ed) 2009, p. 19).</p> <p>The mentoring program has been a valuable source of vicarious experience for students. The program has provided opportunities for the students to consider a wide range of career paths and has assisted them in beginning to plan for their future.</p>	<p>It is important to carefully match each student with an Indigenous mentor who shares similar interests.</p> <p>Teachers co-ordinating the ‘Mentor Program’ need to provide ongoing training and support to mentors.</p>
<p>The students and teachers involved in the Leadership for Reconciliation Program have described the program as a ‘life changing experience.’</p> <p>The program has increased student awareness of the richness of Indigenous history, spirituality, beliefs and lifestyle. The benefits have flowed over into the wider community with students sharing their learnings and experiences.</p> <p>The program has assisted gifted Indigenous students to grow as leaders who are proud of their Aboriginal heritage.</p>	<p>The program requires a large amount of corporate sponsorship to fund the program.</p> <p>The itinerary needs to be regularly monitored to ensure the experiences accurately highlight the richness of Indigenous history, spirituality, beliefs and lifestyle.</p>

Conclusion

Lost potential is not the (most important) issue here, the greater fear is loss of Self. (Silverman, 1998, p. 205)

“One of the most pervasive frustrations in gifted child education – in fact, all education – is that there are no solutions that work each time with every student” (Delisle, 1988, p. 29). When determining the strategies, interventions and curriculum which may work best with Indigenous underachievers, teachers or counsellors need to assess the students’ “behaviour, attitudes and assessments that they make of themselves” (Ramsey & Ramsey, 2002, p. 104). The AIM recommends creating class and individual profiles of these students to assist when creating a plan of action. It implements strategies designed to enhance academic self-efficacy and present them with an open-ended curriculum where task difficulty matches the student’s current

skill level. As previously stated, the degree of difficulty of the tasks increases gradually as the students achieve success and their skills develop.

Unhappiness and underachievement often “lies in the mismatch between children’s needs (academic and emotional) at any particular time and the extent to which those needs are met” (Russel, cited in Varma, 1993, p. 14). Achieving gifted students display a higher degree of self-esteem and self-efficacy, have fewer emotional problems (Colangelo, Kerr, Christensen, & Maxey, 1993, p. 156), and are more likely to reach their potential. The aim of the AIM is to provide interventions for Indigenous underachieving gifted students, which make that realisation of potential possible.

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Appendices

Appendix 1a: Individual Profile Proforma

Appendix 1b: Class Profile Proforma

Appendix 2: Underachievement Intervention Strategies Table

Appendix 3: Identifying the Causes/ Needs/ Interests of Gifted Underachievers

Appendix 4: Identity Web

Appendix 5: Interventions currently being implemented in schools

Appendix 6: Curriculum Intervention: (Section 3a-3e from the Achievement Integrated Model)

Appendix 7: Learning and Reflection Log

Appendix 8: Information Literacy Process

Appendix 9: Bloom's Wheel

Appendix 10: Achiever Rubric

Appendix 1a: Individual Profile Proforma

Underachievers Profile:

Please record any observations or information that you think may assist in ascertaining reasons why the following student may be underachieving.

Include information about the student's work habits, preferences, interests and times when you believe they are working to their ability level.

Please refer to the following articles before completing this profile:

- Profiles of gifted and talented students (Betts.G.T, & Neihart.M. 1988, pp248-253)
- 'How can I determine if a student has low academic self-efficacy?' (Chaffey 2005b,p18)

NAME: _____ CLASS: _____

<p>Interest Areas/ Preferred learning style:</p>	<p>Attitude towards school and learning: (Rogers. K, 2002,p454-455)</p> <p>Total Score:</p> <p>Mean score:</p>	<p>Self-efficacy: (score /10) (Chaffey 2005b,p18)</p> <p>Does the student display:</p> <ul style="list-style-type: none"> - engagement - resilience - persistence - impulsivity
<p>Identity Web (Grigg 2004) / What's on my mind activities (unknown source):</p>	<p>Classroom Observation:</p> <p>Engagement level</p> <ul style="list-style-type: none"> - Are there any times when the student is very engaged? - Behaviours in classroom 	<p>Problem Checklist: (Heacox 1991,p57-59)</p> <ul style="list-style-type: none"> - Learning /17 - Developing Study Habits /8 - Managing school work /4 - Setting goals /5 -Dealing with personal issues /14 - Other <p>Total: /48</p>

Other/ Recommendations/ Testing results

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Teachers are provided with copies of the checklists and activities mentioned in this table, but are not included in this paper. However, these can be sourced from the references supplied.

Appendix 1b: Class Profile Proforma

Achievers (including indigenous)			
Gifted Achievers	Mainstream achiever	Special Ed. achiever	ESL achiever

Underachievers Gifted- including 'invisible' underachievers.				
Gifted Indigenous Underachiever	Gifted non-producer	Double-labelled	Gifted Underachiever	ESL Gifted underachiever

Underachievers Mainstream / Special Education (including 'invisible' underachievers and indigenous students)	
Mainstream underachiever	Special Ed. underachiever

Appendix 2: Underachievement Intervention Strategies Table

NAME/ UA Type/ Other Factors/ Affective Issues	Academic Remedial Strategies	Academic Support Strategies	Academic Intrinsic Strategies	Emotional Support Strategies	Motivation Support Strategies	Social Support Strategies
<p>Indigenous Underachievers and Invisible underachievers</p>	<p>Celebrations: -students celebrate achievement and mastery within the classroom/ school/ parents/ community.</p> <p>Cross age tutoring (subject strength) -Acknowledge strengths and weaknesses. Celebrate strengths through providing opportunities for the student to tutor others in their strength areas while targeting specific areas of weakness for interventions.</p> <p>Identify Skill Gaps: -identify area/s for remediation. Work on one area at a time.</p>	<p>Vicarious experience - Matching students with respected indigenous adults or other achieving students</p> <p>ICT Based Learning: -Use of technology</p> <p>Cultural Resources: -explicit teaching using cultural resources</p> <p>Goal Setting - Progress from daily learning goal setting sessions to weekly goal setting card.</p> <p>Metacognitive Skills based lessons -provide opportunities to develop metacognitive skills: Habits of Mind, DeBono</p>	<p>Environmental Resources: -environmental learning - use of culturally appropriate concrete material.</p> <p>Mastery: -set a continuum of tasks increasing in difficulty as mastery is demonstrated</p> <p>*Monitoring/Goal Setting -Regular opportunities to check progress eg. Draft work checked at regular intervals when working on a larger project. -Allow student to resubmit work -Self-monitoring of performance and behaviour (Reflective log) -Goal setting and task monitoring system for student and teacher</p>	<p>Cultural Celebrations: - Celebrating and sharing culture - encourage tolerance and acceptance</p> <p>Establish relationships based on trust</p> <p>Research a well known Aboriginal person who has achieved (Night of the Notables or Day of Excellence programs)</p> <p>Enhancing Academic Self-efficacy - Embedding the strategies that enhance academic self-efficacy into classroom programs. -Mastery attributional feedback -Vicarious experience - Verbalisation Self Awareness -awareness of attitudes and values of self and others - Activities that assist students in developing a sense of what their interests are, learning style preferences, needs, motivation triggers, etc</p> <p>Grouping within own 'set' culture where appropriate</p>	<p>Vicarious experience - Matching students with respected indigenous adults or other achieving students</p> <p>Mentoring - Mentoring by older experienced Aboriginal Educational/ Educational Worker (if appropriate) trusted adults or an Indigenous Adult from an academic background who has similar interests/ hobbies to the student, ie: someone they can relate to.</p> <p>Basic Needs Assessment: - Ensure student basic needs are addressed. Eg. Food, rest and emotions. - Provide opportunities for students to discuss 'What's on their mind'.</p>	<p>Grouping within own 'set' culture where appropriate Acknowledge and celebrate past successes. *Conflict Resolution Assisting students in developing strategies to deal with conflict -role playing - Co-operative learning -dealing with positive and negative situations - social stories: Addressing problem situations/ issues - Cause and effect situations in the classroom and on the playground "What was the cause of the problem?" What effect does it have on my learning/ interaction with peers?"</p> <p>*Significant Others – Parent/Teacher relationship - Develop a parent / student and teacher partnership to foster the student's capabilities and needs.</p> <p>*Career and Higher Education Goal Setting Expand knowledge of further education and career options. -Assist students in identifying some of the possible steps that may assist them in working towards their possible career paths or interest areas.</p>

NAME/ UA Type/ Other Factors/ Affective Issues	Academic Remedial Strategies	Academic Support Strategies	Academic Intrinsic Strategies	Emotional Support Strategies	Motivation Support Strategies	Social Support Strategies
<p>Gifted Underachievers and Invisible underachievers</p>	<p>Identify skill gaps -Target specific weaknesses through small group or individual intervention programs. Eg. Reading Comprehension</p> <p>Self evaluation/ reflection</p> <p>Interest based projects -independent study to develop own project of interest</p> <p>Cross age tutoring (subject strength) -Acknowledge strengths and weaknesses. Celebrate strengths through providing opportunities for the student to tutor others in their strength areas while targeting specific areas of weakness for interventions.</p>	<p>Goal Setting -Progress from daily learning goal setting sessions to weekly goal setting card.</p> <p>Scaffolding -Breaking down tasks into smaller parts.</p> <p>*Learning Styles -awareness of academic learning styles: Visual, linguistic, Kinesthetic, sequential, etc... Provide tasks that allow students to work within their own learning styles.</p> <p>Reflective Thinking -Free time to reflect and select a task (half hour- reward self-initiating behaviours)</p> <p>Metacognitive Skills based lessons -provide opportunities to develop metacognitive skills: Habits of Mind, DeBono</p>	<p>Feedback -Specific performance and attributional feedback on work completed or skills demonstrated.</p> <p>*Monitoring -Regular opportunities to check progress eg. Draft work checked at regular intervals when working on a larger project. -Allow student to resubmit work -Self-monitoring of performance and behaviour (Reflective log)</p> <p>Interest Based Learning -Negotiating area of interest with the student. Goal setting: task monitoring system for self and teacher followed by self-pacing and selection of learning task.</p>	<p>Enhancing Academic Self-efficacy -Embedding the strategies that enhance academic self-efficacy into classroom programs. -Mastery attributional feedback -Verbalisation</p> <p>Self Awareness -awareness of attitudes and values of self and others -Activities that assist students in developing a sense of what their interests are, learning style preferences, needs, motivation triggers, etc.</p> <p>Learning Styles -awareness of academic learning styles: Visual, linguistic, Kinesthetic, sequential, etc... Provide tasks that allow students to work within their own learning styles.</p> <p>Like Minds --Opportunities to discuss issues with other students in informal chat groups.</p>	<p>Perfectionism -small group counselling sessions on perfectionism</p> <p>Motivation -assessment of motivation levels for learning and school</p> <p>Research tasks -Negotiating area of interest with the student. Goal setting: task monitoring system for self and teacher followed by self-pacing and selection of learning task.</p> <p>Leadership Roles - Providing opportunities for leadership, meaningful responsibilities and tasks (library monitor, lab assistant). The outcome being to develop skills and sense of self worth.</p>	<p>*Conflict Resolution Assisting students in developing strategies to deal with conflict -role playing - Co-operative learning -dealing with positive and negative situations - social stories: Addressing problem situations/ issues - Cause and effect situations in the classroom and on the playground "What was the cause of the problem?" What effect does it have on my learning / interaction with peers?"</p> <p>*Significant Others – Parent/Teacher relationship - Develop a parent / student and teacher partnership to foster the student's capabilities and needs.</p> <p>*Career and Higher Education Goal Setting Expand knowledge of further education and career options. -Assist students in identifying some of the possible steps that may assist them in working towards their possible career paths or interest areas.</p>

Appendix 1b: Class Profile Proforma

Achievers (including indigenous)				
Gifted Achievers	Mainstream achiever	Special Ed. achiever	ESL achiever	

Underachievers Gifted- including 'invisible' underachievers.				
Gifted Indigenous Underachiever	Gifted non-producer	Double-labelled	Gifted Underachiever	ESL Gifted underachiever

Underachievers Mainstream / Special Education (including 'invisible' underachievers and indigenous students)	
Mainstream underachiever	Special Ed. underachiever

NAME/ UA Type/ Other Factors/ Affective Issues	Academic Remedial Strategies	Academic Support Strategies	Academic Intrinsic Strategies	Emotional Support Strategies	Motivation Support Strategies	Social Support Strategies
<p>Mainstream</p> <p>Under-achievers and Invisible underachievers</p> <p>(general cohort)</p>	<p>Identify Skill Gaps:</p> <ul style="list-style-type: none"> -identify area/s for remediation. Work on one area at a time. <p>Group work/ Co-operative learning</p> <ul style="list-style-type: none"> -smaller group monitoring of performance -performance grouping with students of similar needs -careful selection of groups (vicarious experience) -specific roles within a group: responsible for their role as 'recorder', 'scribe' etc... <p>Cross age tutoring (subject strength)</p> <ul style="list-style-type: none"> -Acknowledge strengths and weaknesses. Celebrate strengths through providing opportunities for the student to tutor others in their strength areas while targeting specific areas of weakness for interventions. 	<p>Scaffolding</p> <ul style="list-style-type: none"> -Breaking down tasks into smaller parts. -set specific criteria -Provide scaffolds to assist students in developing the skills and strategies required to complete tasks, short cuts, knowledge of different ways of learning, etc. <p>Goal Setting/Planning and organizing:</p> <ul style="list-style-type: none"> -Progress from daily learning goal setting sessions to weekly goal setting card. -assist students to develop plans for projects; tests, etc.. -provide Study and organizational skills sessions. <p>ICT Focus</p> <ul style="list-style-type: none"> -Use of technology <p>Learning Styles</p> <ul style="list-style-type: none"> -awareness of academic learning styles: Visual, linguistic, Kinesthetic, sequential, etc... Provide tasks that allow students to work within their own learning styles. <p>Metacognitive Skills based lessons</p> <ul style="list-style-type: none"> -provide opportunities to develop metacognitive skills: Habits of Mind, DeBono 	<p>*Goal Setting/Monitoring</p> <ul style="list-style-type: none"> -Students sets their own Academic guidelines to guide learning -Introduce task monitoring system for student and teacher -Self-monitoring of performance and behaviour (Reflective log) -Regular opportunities to check progress eg. Draft work checked at regular intervals when working on a larger project. -Allow student to resubmit work -Goal setting with a focus on developing mastery based on their ability in a particular area. <p>Reward Systems</p> <ul style="list-style-type: none"> -Reward system negotiated with the teacher <p>Reflective Journals</p> <ul style="list-style-type: none"> -Reflective journal: on academic achievement <p>Competitions:</p> <ul style="list-style-type: none"> -Competition based learning: eg. Tournament of the Minds as part of a general enrichment program. Robocup, art, poetry and writing competitions. <p>Study of Eminence:</p> <ul style="list-style-type: none"> - Sport, Art, etc... - Students can identify obstacles that were faced and overcome by famous individuals. - Celebrate their findings in a meaningful way, eg. Night of the Notables and Day of Excellence. 	<p>*Enhancing Academic Self-efficacy</p> <ul style="list-style-type: none"> - Embedding the strategies that enhance academic self-efficacy into classroom programs. -Mastery and attributional feedback -Vicarious experience - Verbalisation <p>*Self Awareness</p> <ul style="list-style-type: none"> -awareness of attitudes and values of self and others. - Activities that assist students in developing a sense of what their interests are, learning style preferences, needs, motivation triggers, etc. <p>Learning Styles</p> <ul style="list-style-type: none"> -awareness of academic learning styles: Visual, linguistic, Kinesthetic, sequential, etc... Provide tasks that allow students to work within their own learning styles. 	<p>Realistic Goal Setting</p> <ul style="list-style-type: none"> -Realistic Goal setting and expectation depending on the needs of the student <p>Motivation</p> <ul style="list-style-type: none"> -assessment of motivation levels for learning and school <p>Teacher/Student counselling:</p> <ul style="list-style-type: none"> - provide opportunities for students to discuss formally and informally their progress, 'What's on their mind,' etc. <p>Feedback</p> <ul style="list-style-type: none"> - provide opportunities for constructive peer feedback on task / behaviour/ performance, etc. <p>Student Task Selection:</p> <ul style="list-style-type: none"> - Involve students in planning / designing their own learning tasks. -Negotiating task related to unit of work with the student 	<p>*Conflict Resolution</p> <ul style="list-style-type: none"> -Assisting students in developing strategies to deal with conflict - ways to stand up to peer pressure -role playing - Co-operative learning -dealing with positive and negative situations - social stories: Addressing problem situations/ issues - Cause and effect situations in the classroom and on the playground -"What was the cause of the problem?" -What effect does it have on my learning/ interaction with peers?" <p>*Significant Others/Vicarious experiences:</p> <p>Parent/Teacher/Student/Community relationship</p> <ul style="list-style-type: none"> - Develop a parent / student and teacher partnership to foster the student's capabilities and needs. - Build a culture of achievement - Acknowledge and celebrate student achievement within the school and the wider community <p>*Career and Higher Education Goal Setting</p> <ul style="list-style-type: none"> -Expand knowledge of further education and career options. -Assist students in identifying some of the possible steps that may assist them in working towards their possible career paths or interest areas

NAME/ UA Type/ Other Factors/ Affective Issues	Academic Remedial Strategies	Academic Support Strategies	Academic Intrinsic Strategies	Emotional Support Strategies	Motivation Support Strategies	Social Support Strategies
<p>ESL/ New Arrivals</p> <p>Underachievers and Invisible underachievers</p>	<p>Language support for ESL gifted underachiever</p> <ul style="list-style-type: none"> -Select language appropriate and culturally appropriate resources for the unit of work being explored -Look at language demands of a unit or text focus: Plan accordingly -working from the known to the unknown context <p>Learning Styles</p> <ul style="list-style-type: none"> - provide opportunities for different ways of learning (visual diagrammatic, rote learning, story telling/oral traditions) 	<p>Language Support:</p> <ul style="list-style-type: none"> -Development of academic language through modelling and scaffolding. - Bilingual support -Provide opportunities to move from 'talking to written tasks. <p>Various Assessment methods:</p> <ul style="list-style-type: none"> - Measuring achievement in various forms (oral, written, project based) <p>ICT based work:</p> <ul style="list-style-type: none"> -Use of technology and other media <p>Goal Setting</p> <ul style="list-style-type: none"> - Progress from daily learning goal setting sessions to weekly goal setting card. <p>Metacognitive Skills based lessons</p> <ul style="list-style-type: none"> -provide opportunities to develop metacognitive skills: Habits of Mind, DeBono <p>Cultural Difference:</p> <ul style="list-style-type: none"> - acknowledging cultural experience -recognition concepts already exists in their first language 	<p>Expectations</p> <ul style="list-style-type: none"> -high expectations <p>Language Support:</p> <ul style="list-style-type: none"> -modelling appropriate spoken language -working from the known to the unknown context <p>*Monitoring</p> <ul style="list-style-type: none"> -Regular opportunities to check progress eg. Draft work checked at regular intervals when working on a larger project. -Allow student to resubmit work -Self-monitoring of performance and behaviour (Reflective log) 	<p>Language and cultural Acceptance:</p> <ul style="list-style-type: none"> -Recognition and celebration of language background (part of school ethos) - Positive classroom environment where ESL students feel they are able to verbalise <p>Enhancing Academic Self-efficacy</p> <ul style="list-style-type: none"> - Embedding the strategies that enhance academic self-efficacy into classroom programs. -Mastery -Specific performance and attributional feedback -Vicarious experience - Verbalisation <p>Self Awareness</p> <ul style="list-style-type: none"> -awareness of attitudes and values of self and others - Activities that assist students in developing a sense of what their interests are, learning style preferences, needs, motivation triggers, etc 	<p>Celebrate Achievements.</p> <ul style="list-style-type: none"> - recognition of prior learning (eg. Mathematics, Science, Literacy) - self-assessment: strengths, learning preferences <p>Value Differences:</p> <ul style="list-style-type: none"> - Value learning other languages and other ways of 'doing' - provide opportunities for students to work in different ways or demonstrate their talents. <p>Encouraging Leadership roles: mentoring, peer group leader</p> <p>Cultural Perspective:</p> <ul style="list-style-type: none"> - provide opportunities for students to explore/ research or identify links between curriculum content and their culture. 	<p>Encouraging Leadership roles: - mentoring, peer group leader</p> <p>Celebrate Gifts in all domains:</p> <p>Identifying giftedness other than in the academic field: eg. Dance, sport, art, music etc....</p> <ul style="list-style-type: none"> -avoid stereotyping *Conflict Resolution <p>Assisting students in developing strategies to deal with conflict</p> <ul style="list-style-type: none"> -role playing - Co-operative learning -dealing with positive and negative situations - social stories: Addressing problem situations/ issues - Cause and effect situations in the classroom and on the playground "What was the cause of the problem?" What effect does it have on my learning/ interaction with peers?" <p>*Significant Others – Parent/Teacher relationship</p> <ul style="list-style-type: none"> - Develop a parent / student and teacher partnership to foster the student's capabilities and needs. <p>*Career and Higher Education Goal Setting</p> <ul style="list-style-type: none"> -Expand knowledge of further education and career options. -Assist students in identifying some of the possible steps that may assist them in working towards their possible career paths or interest areas.

Appendix 3: Identifying the Causes/ Needs/ Interests of Gifted Underachievers:

The following checklists, interviews or activities may be used to gain specific information about the student's interests, learning styles or possible cause/s of underachievement. The highlighted items have been particularly useful when profiling Indigenous students.

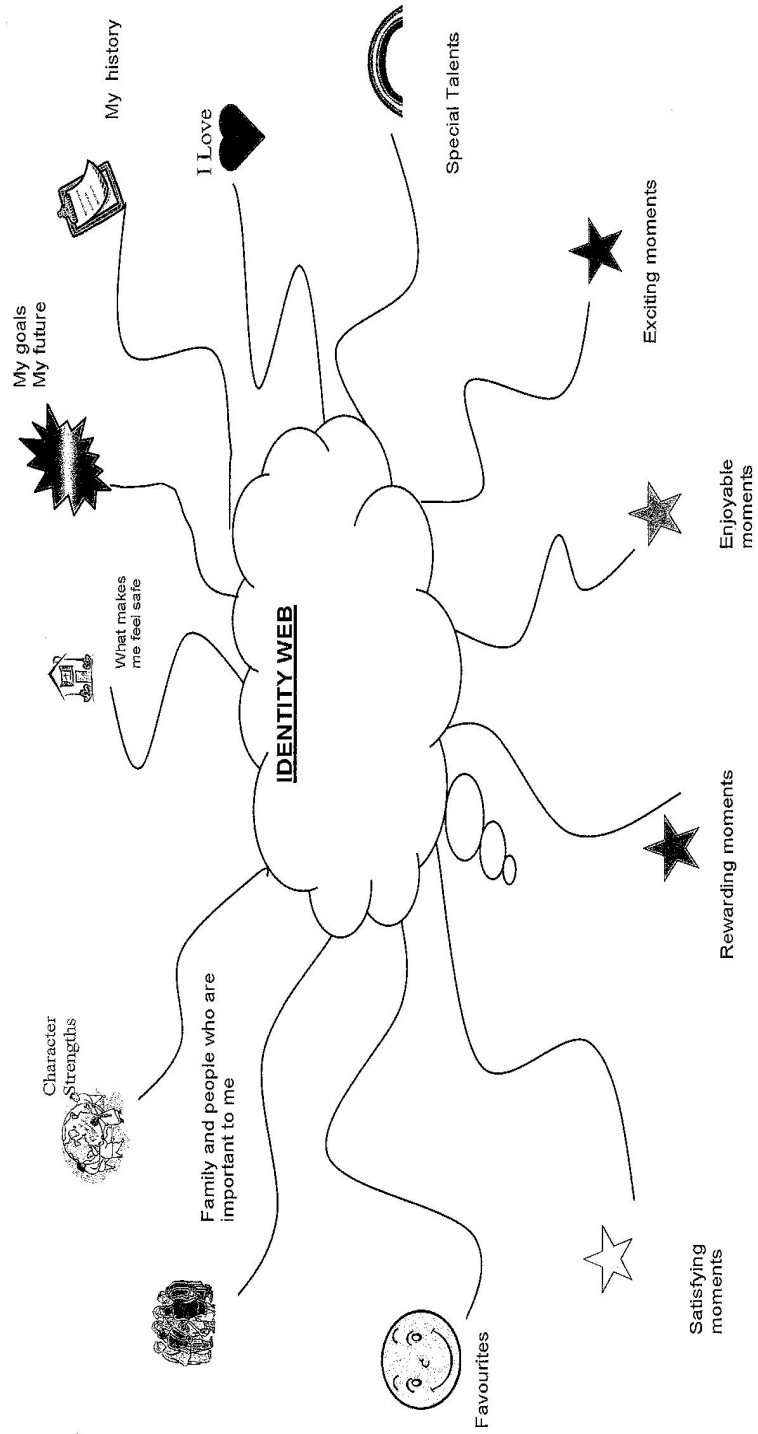
Underachievement Cause:

Student to complete:	Teacher to complete:
1) 'What's on your mind?' Activity. (Students record on a picture of the brain anything they are thinking, worrying about, ie: anything that is on their mind.)	1) Self-Efficacy Question list (Chaffey 2005b,p18)
2) Achievers Rubric (Coil 2005,p104) (Appendix10)	2) Problem Checklist (Heacox 1991,p57-59)
3) Student interview questions with a significant other	3) Reflection comment sheet using the teacher interview questions as a guide. (Heacox 1991)

Student Interests/ Learning Styles:

Student to complete:	Teacher to complete:
<p><i>Identity/ background information:</i></p> <p>1) Identity Web (Grigg, D, 2004) (Appendix 4)</p> <p><i>Interests:</i></p> <p>1) Interest Survey – Renzulli (Source unknown) or</p> <p>2) Multiple Intelligence Checklist for Upper Primary and Secondary: MICUPs checklist (Yr4-6) (McGrath. H and Noble. T 1995,p49-51) or</p> <p>3) Multiple Intelligences online test (use google to locate the test if the web address doesn't work) http://www.bgfl.org/bgfl/custom/resources_frp/client_frp/ks3/ict/multiple_int/questions/choose_lang.cfm</p> <p><i>Attitudes or Learning Styles:</i></p> <p>1 'Attitudes about school and learning' (Rogers,K. 2002, pp454-455) or</p> <p>2. 'How do you like to learn?' (Rogers,K. 2002, pp466-470) or</p> <p>3. other Checklists on the relevant subjects (Rogers,K. 2002, pp456-465) or</p> <p>2) 'How do you feel about school?' checklist or</p> <p>3) Learning Style Inventory</p>	<p>1) Reflection comment sheet (Appendix 1)</p>

Appendix 4: Identity Web



Di Grigg 2004

Appendix 5: Interventions currently being implemented in schools

1. Numeracy Project

While students may have a high learning potential, there may be skill gaps and other underlying causes for their underachievement that need targeting hence, interventions need to be designed and administered. The numeracy project designed by Michele Sunnucks and implemented by Wendy Temple at St Therese Sadleir, has been operating successfully since 2007, when initial individual assessments of the schools Indigenous students took place. The assessments indicated that the students had gaps in their understanding in the areas of counting and place value. As a result, a daily mathematical intervention was organised for Indigenous students. The improvement in the students' numeracy results have been overwhelming. Gifted underachieving students in particular benefit from this form of intervention as it provides an opportunity for students to enhance their academic self-efficacy in mathematics, fills skill-gaps and prepares students for the eventual inclusion in gifted mathematics classes.

Overview of Numeracy Project:

1. Pre-testing of all Indigenous students
2. Grouping of students according to need areas identified when pre-tested.
3. Creation of specific mathematical activities aimed at target skill gaps.
4. 30-minute daily small group withdrawal of students.
5. Post-testing of students to ascertain learning gains and to identify need areas.
6. Ongoing assessment and evaluation.

2. Interest-Based Learning: using ICT

Gifted underachievers often have less metacognitive and transfer skills, (Peters et al.. 2000, p. 616). Problem solving using robotics encourages reflective thinking and provides opportunities for students to develop metacognitive skills. Students respond positively to robotics challenges, as they perceive them as 'fun' rather than work. The Robo-dance unit where students program robots to dance to their own selection of music increases task engagement. Upon completion of the robotics intervention students participate in state robotics competitions and act as mentors to other students. The increased self-efficacy displayed by the students may then be transferred into other academic areas.

3. Research on Eminent People

Studying autobiographies and biographies can provide examples of success and failure, which may assist students to realise that you can "learn a great deal from failures," (Kerr. cited in Adderholdt-Elliott 1987, p. 58). Focusing on the lives of significant Indigenous Australians who have contributed to our society, demonstrates that they often had to take risks, follow their dreams and reach for the stars in order to achieve success.

The study of a significant Indigenous person may also assist students in understanding that success in life is achieved not just on academic records but on meeting needs, overcoming obstacles and creating opportunities for oneself. These units of work provide an important source of vicarious experience for Indigenous students and may highlight the possible rewards of high achievement and their role in the process.

Overview of the study on Eminent People:

1. Students select a famous Australian to research.
2. The teacher provides scaffolds to assist students with the organisation of the research project.
3. Students use a 'Learning and Reflection' log to assist with the organisation of the research sessions.

4. The teacher provides opportunities for students to discuss their research and gives specific performance feedback.
5. The students design their table displays for the presentation day and create/ design the costume they will wear.
6. Students present their research project to the school and local community. The visitors walk around the table displays and ask the students questions. The students are encouraged to dress-up and pretend they are the eminent person that they studied.

4. Specific Indigenous units of work

Aboriginal people generally hold the view that education for their children must acknowledge their culture, help Aboriginal children to learn and know their culture, and support their cultural identity.

(Hughes & Moore,1997, p.10)

In a school where the majority of students are Indigenous Australians, it is imperative that the curriculum incorporates Aboriginal perspectives wherever possible. This integration into Key Learning Areas, allows the students to acknowledge the importance of their Indigenous heritage in every aspect of Australian life. It also encourages the students to understand and respect the richness of this heritage.

In addition to the integration of Indigenous perspectives, each grade undertakes a particular Aboriginal focus for one term each year. The aim of these specific units is to deepen the student's knowledge and understanding of Aboriginal people, their culture and traditions.

Kindergarten - Places We Know and Places We Are Yet to Discover

Students examine characteristics common to people, including Aboriginal peoples, describing some of the similarities and differences.

Year One - Indigenous People of Australia

Students identify the names and location of Aboriginal language groups in Australia. They study traditional foods and weapons used for hunting.

Year Two - Dreaming Narratives

Students learn how Aboriginal children are taught to connect to their country through Dreaming Stories. Students are introduced to the three elements of a Dreaming story: rules for living, the natural environment and spiritual connections to country.

Year Three - People and their Beliefs

Students compare and contrast the beliefs of the Aboriginal People and those of the Melawatis, the indigenous people of Indonesia. The students explore how these two groups of people influence their native countries.

Appendix 5: Interventions currently being implemented in schools continued

Year Four - Before and after British Colonisation

Students explore different language groups of Australia's original inhabitants, the Aboriginal People, the explorers who came to their shores and the arrival of the British colonies and occupation of Australia.

Years Five and Six - Reconciliation with Indigenous Australians

Students study significant events that have shaped Australia's identity, particularly the contributions of groups, movements, policies and laws to the development of fairness and social justice in Australia.

5. Mentoring for the Future/ Career Education Project

(Grace Mugavero, Kate Howard, Susan Clifton – Program designers/ co-ordinators)

Only 51 per cent of Indigenous students across New South Wales remain at school to complete year 12. It is imperative for the sake of social harmony, and for the economic and cultural prosperity of rural and regional communities in New South Wales, that we close the gap between the educational achievements of indigenous and non-indigenous students, and foster success amongst all of our young people whether black or white. (Fardell, 2009, p. 13821)

The primary school can play a pivotal role in improving educational success amongst Aboriginal students. Through the “Mentoring for the Future” Program, students in Years Five and Six are matched with an Indigenous adult. The aim of the program is for the mentor to serve as a role model for the student, providing encouragement to complete schooling and pursue further education.

Initially, the email communications are based on common interests between the student and mentor. These are usually related to sport, dance or music. However, as the relationship develops and trust established, the mentor initiates discussions regarding their own education and career (all mentors must have completed secondary education and have commenced/completed tertiary study). By discussing their own educational pathway, the mentors are providing the students with the guidance and confidence to start to focus on their own future.

Ultimately, the focus for the correspondence becomes the student’s own goal setting for the future. The mentor asks questions about what they would like to do when they leave school, what decisions need to be made about subject choices and tertiary courses available.

The communication with successful Aboriginal adults in the Mentoring for the Future program provides the vicarious experience required by Indigenous students. Furthermore, it highlights to these students and their families, that educational success is possible.

Two other projects emerged from the Mentor program - Careers Expo and Workplace Visits. At the Careers Expo, volunteers attend the school for a day and provide students with the opportunity to learn about a wide variety of professions. In the past, the students have experienced workshops related to; policing, plumbing, marketing, banking and finance, consulting, law, medicine, real estate, education, mechanics and management.

The Workplace Visits program, allows the students the opportunity to meet people in their place of employment and discuss their occupation. Large workplaces are selected so the children are able to meet and interview a myriad of people employed across a broad range of occupations. At Sydney University, the students met librarians, lecturers, catering staff, grounds staff, managers, students and facility operators. Other workplace visits include; Sydney International Airport, South Sydney Council and Westfield Shopping Centres.

Both the Careers Expo and Workplace Visits programs reinforce the importance of planning and considering a multitude of career possibilities.

6. Wingara “A Place To Learn and To Think” (Mary Weaver and Susan Clifton - Program designers/ co-ordinators)

Wingara is a learning centre that provides an environment in which students with severe emotional and social issues can experience success as learners and become functioning members of the school community. The center developed from a strong need to cater for students within the school who are considered 'at risk'.

Intensive support is provided in Literacy and Numeracy, while providing the students with the skills to recognize and manage their emotions and behaviour. One of the main aims of the "Wingara" Learning Centre is to develop the student's skills to function effectively and return to the mainstream environment.

The success of the unit largely depends on the positive and collaborative relationships between the students, their parents/careers and the entire school community.

7. Leadership for Reconciliation Program (Susan Clifton - Program designer/ co-ordinator)

Most educators agree that a major role of education is the transmission of a society's culture from one generation to the next.....Aboriginal students have a distinctive cultural heritage...
(Hughes & Moore, 1997, p. 4)

The Leadership for Reconciliation Program is specifically designed to develop leadership skills in primary students (Years 4,5 and 6). It involves students from two schools, one a very disadvantaged inner city school, and the other in a more advantaged suburb on Sydney's lower north shore. These students work together in preparation for a five-day trip to Central Australia.

One of the main aims of the program is to develop leadership skills in the students as they act as Ambassadors before, during and after the trip. Once selected, the students embark on a momentous journey to strengthen Reconciliation between Indigenous and non-Indigenous students.

The learning and experiences gained from this opportunity are invaluable. The students are exposed to richness of Aboriginal culture in Central Australia as they work and play together with the various communities.

On their return, the students prepare presentations for other schools and groups. These genuinely reflect the children's pride in their heritage and increased awareness of Indigenous history, spirituality, beliefs and lifestyle.

In the longer term, many students demonstrate increased confidence in themselves and their academic learning as a result of the Leadership for Reconciliation program. Many become positive leaders and role models in the school community.

Ultimately, we hope the program will encourage these students to be committed to positive leadership well beyond their primary school years.

Appendix 6: Curriculum Intervention: (Section 3a from the AIM)

As stated previously, the following components are essential when designing an engaging curriculum:

- developing an ‘enduring understanding’ (universal idea) that is transferable across more than one discipline,
- formulating ‘essential questions’ related to syllabus outcomes and the ‘enduring understanding,’
- identifying the concepts (important knowledge) needed in order for a student to answer the ‘essential questions’.

Below, is a brief overview of the steps needed to design curriculum to engage gifted achieving and underachieving students.

1. Enduring understanding

When designing a curriculum for achieving and underachieving students, the teacher reflects on:

- What is the ‘big’ or the universal idea of this unit?
- What will students understand/ accomplish / remember from studying this unit of work?

An enduring understanding is developed using concepts such as those listed in the table below.

These relate to the knowledge and skills contained in the syllabus outcomes.

CONCEPTS or THEMES		
Power	Death	Leisure
Ownership	Work	Courage
Freedom	Commitment	Peace
Family	Responsibility	Violence
Invincibility	Sound	System
Hate	Creation	Silence
Morality	Evaluation	Energy
Communication	Conservation	Pollution
Life	Conflict	Change
Religion	Wisdom	Love
Friendship	Tradition	Cycles
		Other

(Gross, McLeod, Drummond, & Merrick, 2001, p. 81)

2. Essential Questions

In planning essential questions, the teacher considers:

- What perspectives does this enduring understanding have?
- What important issues problems or debates are relevant?

Essential questions are those that are open-ended with no single correct answer. They are designed to stimulate inquiry, debate and further questions, and allow scope for students to engage with the curriculum within their ‘flow zone’.

3. Important Knowledge

Important knowledge is closely linked to syllabus outcomes and indicators- all the facts, concepts and principles related to the unit. The amount of knowledge a student has may be determined through pre-testing. The information gained from the pre-test is used to shape the teaching and learning experiences designed. When students already have knowledge of a topic, the teacher assists them in applying this knowledge in learning experiences that challenge their thinking.

Pre-tests that may be implemented include:

- Content related multiple choice and/or short answer questions using Bloom’s Taxonomy or the Williams Model to differentiate questions.
- Concept maps aligned with syllabus outcomes.
- Off-level testing.
- Discussion with small groups or one to one- this will depend on the age of students and the class size.

Program Model Selection/ Learning Activities (Section 3b and 3c from AIM)

As stated previously, once the enduring understanding, essential questions and important knowledge are identified, the learning tasks and assessments are then designed using models based on sound pedagogy. The teacher designs compulsory tasks for the students to complete before they are given opportunities to design their own learning tasks.

Three examples of compulsory tasks are outlined in the table below.

The product options listed demonstrates how students are given the opportunity to engage in an area of strength or interest.

Example: (Program Model Selection)

KLA	Model	Learning task	Product options
HSIE	Wheelwork Williams: Skills of search	Study the contribution of one significant Indigenous Australian to Australian society. - How has he/she contributed to Australian Society? - What challenges did they face? - How has he/she been an inspiration to others?	Students may present their research in any format in negotiation with their teacher (Other products may be found in the Bloom’s Wheel – Appendix 9) For example: Poetry: Rap / rhyme Drawing PowerPoint Artwork Literary description / factual or historical recount Dance, song, music
----- HSIE	----- Williams: Analogy	----- How is the desert like Antarctica?	Pod cast Design and make Posters Interviews
----- HSIE	----- Bloom’s Taxonomy: Analysis	----- Compare and contrast the beliefs of the Aboriginal people and those of the Melawatis, the Indigenous people of Indonesia. Analyse how these two Indigenous groups influence their native countries. (Yr3)	Other options

(The learning tasks for underachieving students need to be based on the students’ current level of performance, with the level of difficulty gradually increased to evaluation and synthesis, as the students achieve success and their self-efficacy is raised.)

Appendix 7: Learning and Reflection Log

Name: _____ Class: _____





Learning and Reflection Log			
This log MUST be filled at the beginning and at the end of each lesson and signed by your teacher.			
<i>Date</i>	<i>Plan</i> What am I going to work on today?	<i>Reflection on learning / effort</i> When filling out my log I need to reflect on questions like: What did I achieve/learn? What new skills did I learn? What might I do differently next time?	<i>Teacher's Signature</i>

Maria Bousnakis, Tracy Burns (2007)

Appendix 8: Information Literacy Process

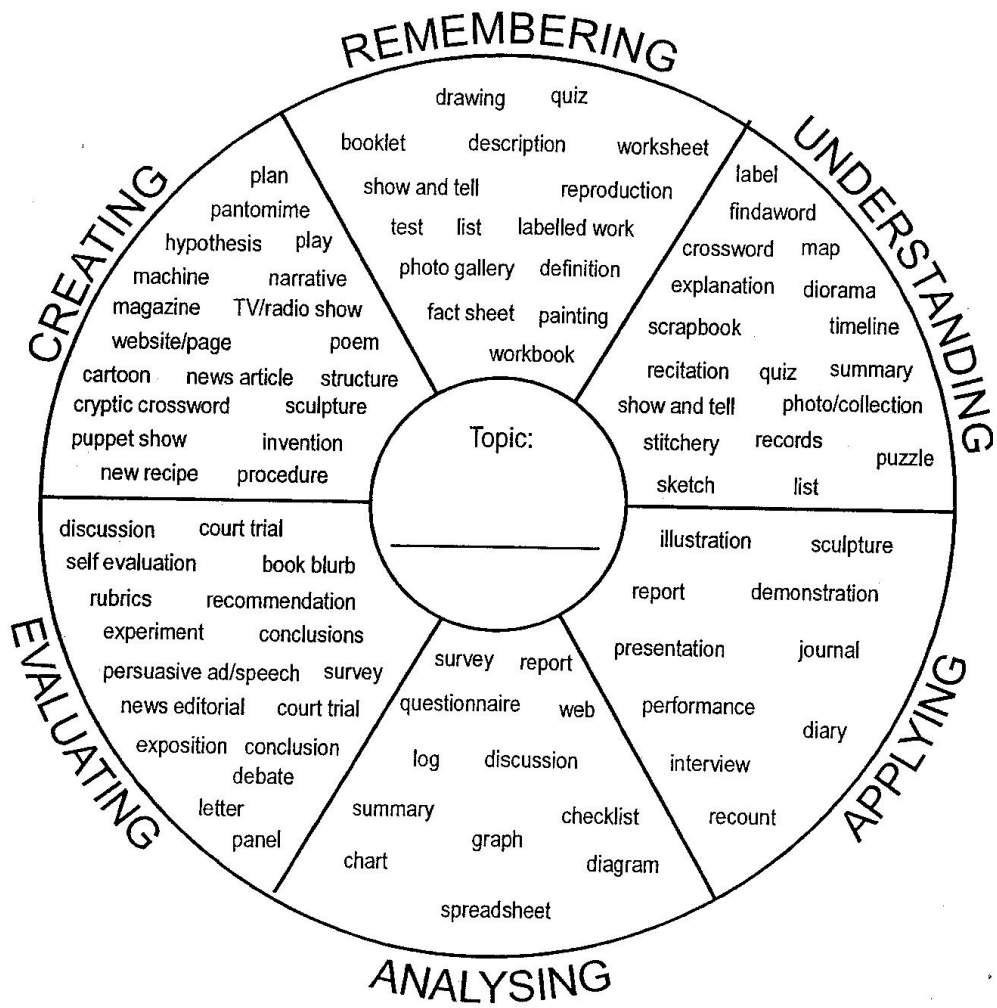
The Information Process will help you organise and reflect on the compulsory and choice tasks you will be working on this term.

There are five steps in the Information Process.

<p>DEFINE What is the topic? What are you going to research? What is the task asking me to do?</p>	
<p>LOCATE Where can you find the information? There are many different sources of information to choose from.</p>	<p>Internet Books Articles Recordings</p>
<p>SELECT What is the information that I need? What are the key words for this idea? How can I put this idea into my own words? Select the important ideas from the sources you are using.</p>	
<p>ORGANISE What is the best way to use my time? How will I organise the information I have found? Have I recorded on my log sheet?</p>	
<p>PRESENT How will my research be presented? What is the best way to present my work to a group of people or individuals? What are the products I will be presenting? Presentation is a very important part of the information process. This shows what you have learnt through your research.</p>	

Appendix 9: Bloom's Wheel: (Mackay, B. & Hoy, L. 2002)

WHEEL WORK



Appendix 10

NAME: _____

Achiever Rubric

(Adapted from Coil, 2005)

Read this rubric and think about which comment best describes how you feel about yourself now. Colour in the squares that represent you today and then put a star in the boxes of the comments that you want to identify you at the end of the term.

Criteria:	Not so Hot	Working on it	Almost there	You're an achiever
Self-efficacy (What I believe in me)	I am the type of person who fails so I don't even bother to try.	I have some ability to do things and I try not to give up when I fail at something	The failures that I have teach me how to succeed. People who know me have faith in me.	I am the type of person who does well in anything I try. I look at my mistakes as a learning tool. I don't give up.
Goal setting	I don't bother setting goals, good things will happen to me one day.	When there is an exam I will study in the week leading up to it.	I set goals for things now and in the future. I check them sometimes to see how I am going.	I am the king/queen of setting goals. I make plans and check them regularly to make sure that I am on track to success.
Motivation (What makes me work)	I don't care about how I go at school.	I like learning some things but if they are new I like other kids to be working with me because it makes it easy.	If things get hard then it makes try even harder. Even though people around me encourage me I like to slack off sometimes.	I am excited about learning; I am interested in most things. I enjoy the challenge of the task when things get a bit harder.
Organisational skills	I always have to look hard to find things because I lose things. I don't think that I am very organised.	I know what I have to do and sometimes make notes however I often spend so much time thinking about things that the task doesn't get done.	I don't get to play as much as other kids because I always get my homework done first.	I am very organised and make sure that all my work is in order and done on time so that I don't have to stress about it and I can still go out and do my favourite things.
Study skills	Study is something that I don't do and I wouldn't know how to begin.	I don't enjoy studying so I leave it to the last minute.	I complete my homework and when I have assignments I research the topic. I like to memorise things before a test.	I am the ideal study buddy, I can note-take, research and recall information this means that I am always prepared.