LEADERSHIP • LEARNING INTO THE FUTURE

LEADING AND LEARNING INTO THE FUTURE

ON THE EDGE

Editorial

An extract “Focus on learning
www.debraway.edublogs.org
"I teach kids, not subjects! But, of course, I do this through English, Study of Society, Religious Education, Business and Technology ... You could say that my whole career has been one of adapting, up-skilling, staying abreast of the changes and changing! Now, even my current role as an educator is simply all about learning.

How can we best do this for the students that we serve?
Middle Years of schooling principles and philosophies have been my driving force – and now, as we continue through this century and time of connectedness, these principles and philosophies have taken on new meaning, or a more advanced meaning. In a sense, they have been reinforced and validated, if you like. When I read the various tweets by many leaders in our field and listen to the greats (like Sir Ken Robinson), it is clear that we need to engage our learners in design, in creativity, in problem solving; using the tools that we have available to us in this digital age. We must provide them with real life journeys for today’s world. We are not preparing them for the 21st century - we are in it! Our kids are living it and we must be responsible and accountable for that. This is what middle schooling philosophies have always been about! About ensuring that what we do with our kids (and for them) is relevant, appropriate, challenging, motivating and that all are able to feel a sense of achievement. That it is student-centred, not test-driven; that it might be flipped; that it is inquiry-based and project-based; that we use the appropriate tools for the appropriate task and allow for creativity.

And so, I continue the learning curve that is education (that is life really), and I take on this challenge of connectedness – I tweet, I facebook, I own an iPad, a smart phone and I connect with those of you who are also out there. Our learning community is growing, and it excites me.”

Debra Evans,
Journal Editor (MYSA)

It is so essential that the learning excites our students too. We need to instil in them a passion for learning and, clearly we need to do this in ways that are relevant to their lives.

This edition of the Australian Middle Years of Schooling Association Journal provides evidence that educators across Australia, New Zealand and internationally are working to ensure that our middle years’ students are being excited and engaged in their learning.

The number of articles received and the quality of these for our Non-refereed and Focus on Schools section for this edition has been exceptional; showing the breadth of work happening in our middle years classrooms around the country and abroad. It is exciting to showcase an International Middle Years Curriculum contribution from the United Kingdom, as well as being able to publish multiple articles from two schools highlighting the extent and diversity of work being undertaken at present that specifically targets our middle years’ learners.

I believe this May edition will provide you with a number of ideas and various strategies that could be readily adapted and implemented into schools and classrooms; providing excitement and ultimately building passion and motivation for our students in the middle years.

I sincerely thank all contributors to this edition. The interaction and conversation that occurs as we compile the journal is testament to the dedication of all who contribute their knowledge and expertise. As well, to those who assist in the editing processes; your efforts are gratefully accepted and acknowledged. I trust that all members will learn from this edition of the MYSA Journal.

Debra Evans,
Journal Editor (MYSA)

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Debra Evans,
Journal Editor (MYSA)

The views expressed in this journal are those of the individual contributor and do not necessarily reflect the views of the Publications Sub-committee or the Middle Years of Schooling Association (MYSA). For further information about MYSA refer to www.mysa.org.au

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Abstract

In Australia, the introduction of the National Assessment Program for Literacy and Numeracy (NAPLAN) in 2008 marked a national shift towards an accountability-driven education agenda. Administered in Years 3, 5, 7 and 9, the tests sit predominantly across the grades commonly known as the ‘middle years’. Both advocates for and critics of NAPLAN note the potential of the test regime to impact on teaching and learning practices, especially as schools and systems strive to reach benchmarks. Coinciding with the introduction of NAPLAN testing, the nation experienced a renewed interest in middle years’ curriculum, pedagogy and assessment practices. This is evident in, for example, the Melbourne Declaration for Schooling (MCEETYA, 2008), which advocates the need for appropriate educational practices in the middle years to ensure optimal learning outcomes for young Australians. Among the practices is a call for authentic and reflective assessment with high expectations, evidenced by higher-order thinking challenges. It is within this context that this study of the 2009 NAPLAN test instruments of the literacy domain for Years 5, 7 and 9 was undertaken. Using Bloom’s Revised Taxonomy (Krathwohl, Bloom, & Masia, 1973) as the analytic framework, each test item was assessed to determine the cognitive complexity of the item. The analysis reveals that less than 10% of questions in the reading tasks afforded the cognitive challenge of higher-order thinking, and hence the interests of middle years’ education and NAPLAN testing might offer some tension in our education system.

This paper presents a snapshot in time of a NAPLAN test and raises questions about the degree to which it contributes to the goal of increasing the cognitive challenge of learning and assessment practices in the middle years. It is argued that the NAPLAN test should be understood to be one insight into student achievement, but not the only or full story reflecting student capabilities. NAPLAN results should be employed in this knowledge and not be seen as a panacea for reforming the education system.
Introduction

National Assessment Program Literacy and Numeracy (NAPLAN) testing commenced in Australian schools in 2008 signifying a shift towards an accountability-driven education system agenda (Lingard B., 2010). Reading, writing, language conventions (spelling, grammar and punctuation) and numeracy are tested annually in three year levels belonging to the ‘middle years’, Years 5, 7 and 9, and a fourth in the early years (Year 3). An overarching expectation of NAPLAN testing is the improved accountability of teachers and schools and ultimately, it is expected, improved outcomes for all learners. However, evidence obtained from the Federal Government’s ‘My School’ website (ACARA, 2013) suggests that for some groups of students very little has changed. In Queensland, for example, the results for students in Years 5, 7 and 9 showed little to no improvement from 2008 to 2012 in the domains of reading, spelling, and grammar and punctuation, though there were marginal improvements reported for the 2012 annual assessment process. This raises questions about the diverse factors that impact upon student success and the ways in which the NAPLAN regime (and related practices) support or undermine attempts to respond to the particular needs of middle years’ students.

Coinciding with the NAPLAN agenda, a renewed focus on teaching and learning for students in the middle years is also on the national - and subsequently the state - agenda. Nationally, the Melbourne Declaration on Educational Goals for Young Australians (MCEETYA, 2008) identifies one of its eight interrelated action areas as ‘enhancing middle years’ development’, which aligns with the 10 to 15-year age group of interest in this paper, in particular highlighting the need for educational approaches that are suitable for young adolescents, as articulated in the following quote:

The middle years are an important period of learning, in which knowledge of fundamental disciplines are developed, yet this is also a time when students are at the greatest risk of disengagement, pedagogical from learning. Student motivation and engagement in these years is critical, and can be influenced by tailoring approaches to teaching with learning activities and learning environments that specifically consider the needs of middle years’ students (MCEETYA, 2008, p. 10).

Drawing on the work of experts in the middle years field such as Bloom (1956), Barratt (1998), Carrington (2002), Chadbourne and Pendergast (2005) and Lingard (2001; Vale, Chilcott, & wires, 2010; 2010) and, well documented authorities in the area of educational assessment such as Wiggins (1989), Earl (2003) Athanassou and Lampanianou (2002, 2005) and Brady and Kennedy (2009), this paper explores the tension between high-stakes testing and middle years’ approaches to assessment in particular learning and teaching which involves higher-order thinking strategies and authentic and reflective assessment with high expectations, which are identified by the Middle Years of Schooling Association (MYSA) Position Paper (2008) as necessary elements to engage young adolescents. Significantly challenging for schools is the alignment of curriculum, pedagogy and assessment procedures to meet the needs of students in the middle years. Carrington (2002) argues that teachers should be encouraged to align pedagogy and assessment practices because assessment in the middle years should be viewed as an integral part of curriculum planning and classroom practice. She makes the distinction between assessment that aligns social and academic outcomes in the middle years and traditional tests, which are at odds with the middle school principles. Furthermore, Carrington (2002) argues that ‘traditional’ tests are often competitive and do not allow for the students to demonstrate their learning in such areas as problem solving and critical thinking. Bloom (1956), who is long acknowledged as providing a hierarchy of language which, in action, promotes a range of assessment practices and whose theory underpins much of what is known and understood about the field of assessment research, describes higher-order thinking as involving problem solving and reasoning. He explains that students use a range of cognitive skills including, but not limited to, deductive and inductive reasoning, hypothesising, comparing, classifying and critiquing when functioning in the higher cognitive domain. His taxonomy, more latterly revised, is a developmental continuum ranging from concrete to abstract level of cognition (Kohn, 1999) and it is used in this research as a basis for making judgments about the level of challenge built into NAPLAN tests that were explored. It would be ideal if the NAPLAN tests and the characteristics of effective middle years’ assessment practices were aligned, and certainly not competing or poles apart.

Literature review

High-stakes testing: background and literature

High-stakes testing may be prominent as a 21st century phenomenon but, in fact, it has a long history, initially connected to the challenge of measuring human intelligence. It originated in France in the late 19th century when Binet used crude methodology, which has subsequently been revealed to lack validity, to ascertain the intelligence of students by measuring the circumference of their heads, as a means of diagnosing children in need of special assistance classes (Gould, 1981). In 1904 Binet employed a method involving simple tasks to determine those students requiring special education. German psychologist, Stern, developed this technique further in 1912 by dividing the mental age by the chronological age to calculate an intelligence quotient (IQ). Subsequently, attempts to measure intelligence have been linked to both noble and ignoble intentions. For instance, in 1916 Terman recommended IQ as a way of constructing an efficient society, and this was further promoted by Goddard in 1917 as a means of curtailing the reproduction of the ‘feeble minded’ (Gould, 1981). Terman and others foregrounded intelligence testing as involving problem solving and reasoning. He explains that students use a range of cognitive skills including, but not limited to, deductive and inductive reasoning, hypothesising, comparing, classifying and critiquing when functioning in the higher cognitive domain. His taxonomy, more latterly revised, is a developmental continuum ranging from concrete to abstract level of cognition (Kohn, 1999) and it is used in this research as a basis for making judgments about the level of challenge built into NAPLAN tests that were explored. It would be ideal if the NAPLAN tests and the characteristics of effective middle years’ assessment practices were aligned, and certainly not competing or poles apart.

Critique of high-stakes testing

Criticism of high-stakes testing, such as NAPLAN, takes many forms, some of which will be shared in this paper. It is argued that high-stakes testing does not lead to improved student results. According to the data at the time this study was conducted in 2009, and generally since that time, Queensland’s middle years’ students were reported as being among the worst performing students in the country in the areas of literacy and numeracy (ACARA, 2013). More recent data indicates moderate improvement in 2012 with Queensland moving from sixth to fifth place out of the eight states and territories. A second and related concern is that, even if high-stakes testing regimes improve performance in tests, they do not necessarily improve learning outcomes. Higgins (2005) asserts that the results are largely misinterpreted; as such, claims of improved standards lack supporting evidence. That is, an increase in test scores is not indicative of an increase in student learning (William, 2008). Harlen and Deakin Crick (2002) concur, arguing that teachers merely drill content and students develop better test taking and memorisation skills and that high-stakes testing regimes become a threat to the validity of test score interpretation (Frey, Eccles, Edwards, Pedrotti, & Pexton, 2003). They suggest that coaching and practice can help students raise their scores simply by getting used to the types of questions and by practising test style, thereby developing a skill set related to test wisdom rather than a display of cognitive ability. Test wisdom is described by Griffin and Nix (1991, p. 221) as a student’s capacity to use the characteristics of the test and/or the test situation to receive a ‘high score’. A concern is that teachers may incorrectly read test wisdom as an indication of student learning, interpreting that students have mastery of these skills and move on to the next level. However, their students may experience difficulty, having not achieved a depth of understanding of concepts, and may be overlooked in terms of potential intervention.

Haladyna, Downing and Rodriguez (2002) agree that test practicing may lead to test wisdom, which will affect the consistency of the test results with repeated testing. Teaching to the display of students’ ability to achieve high results in test taking and consequently may result in a false representation of the cognitive level of the child. If these tests were designed as a valid tool for measuring cognitive ability they

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In high-stakes testing regimes it is common for teachers to adopt surface rote teaching where regurgitation of mere facts is the outcome and the curriculum lacks depth and complex knowledge required for problem solving and decision-making (Shepard, 2000).

The fourth concern is the reduction of teaching time. Black and William (1998) illustrate this effect using the analogy that it does not matter how much time the farmer spends measuring the pig; the pig will not get any fatter if the farmer does not feed it. When teaching time is diverted to developing test skills and sitting tests, the time allocated to teaching is reduced. Critics, such as Gunzenhauser (2003), support the concern that this culture of constantly measuring student performance reduces valuable teaching time and that the accountability movement that places inordinate value on test scores to ensure reaching a single benchmark will lead to the practice of ‘teaching to the test’ instead of teachers focusing on areas that place inordinate value on test scores to ensure reaching a single benchmark will lead to the practice of ‘teaching to the test’ instead of teachers focusing on areas that need development and even neglecting the child. Brown, Irving and Keegan (2007, p. 136) warn that ‘many negative consequences accrue because national’ assessment has become high stakes’. They assert that, when the nature of the assessment is high stakes, the teacher pedagogy and learning experiences are subverted to mimic more closely the assessment, with the result becoming more significant than the students taking the test.

Validity

Critics argue that middle years’ teachers are wasting valuable teaching time with assessment tasks with questionable validity (Gronlund & Waugh, 2008). Evidence from other countries, such as the United Kingdom and the United States of America, indicates that, when accountability for educational outcomes is measured solely using a moment-in-time, national, full-cohort test, validity and reliability of the assessment data is questionable, such that it cannot be analysed by policy makers in meaningful ways (QSA, 2009). Athanassou and Lamptiouinos (2005, p. 168) explain that there are at least three types of validity:

Content validity – does the test match the content and learning outcomes of the subject?

Criterion validity – does the assessment provide evidence of future achievements or performance in other related subjects?

Construct validity – does the assessment really involve the particular behaviours, thought processes or talents that are said to be assessed?

It would appear that there are other validity issues in relation to NAPLAN, including Lather’s (1986) developmental construct of catalytic validity, which addresses issues of altering reality.

In response to a South Australian teacher dismissed for altering Year 7 NAPLAN test answers, the Australian Education Union State Vice-president, Anne Crawford, highlights the intense pressure on students and teachers because of the publication of NAPLAN data on the My School website. She argues that the ‘... test has been given a status it simply doesn’t deserve’ and suggests that the general public cannot be assured that teachers altering NAPLAN test results is not a common occurrence (Owen & Edwards, 2010). A spokesman for the then federal Education Minister, Julia Gillard, argued that teachers changing results is not widespread. However, the ethics of some educators in some Queensland schools is being questioned after Queensland’s NAPLAN security breaches. An article in the state-wide leading newspaper in Queensland, the Courier Mail (Chilcott & Schultz, 2010), reporting cheating allegations against a principal at a Queensland school points to another kind of validity – Professional Validity. Queensland Minister for Education at the time, The Honourable Cameron Dick, is quoted in the Courier Mail (Cartwright, 2011) as saying, ‘We don’t want anyone breaching the rules’. ACARA reinforces this statement when clearly stating in the Code of Conduct in the National Assessment Program Literacy and Numeracy Handbook for Principals that breaching the Professional Standards for Test Administration undermines the integrity of the tests (ACARA, 2011, p. 5).

Middle years’ pedagogy

Because NAPLAN testing is conducted in Years 5, 7, 9, and 10, it is a significant feature in the educational landscape that stretches across the middle years, which typically include Years 5 to 10. It is pertinent to understand the theory underpinning middle schooling principles, which are regarded as providing an appropriate education for young adolescents, in particular with respect to assessment practices. Young people in the middle years are often broadly characterised by the term ‘young adolescents’. Bahr (2005) suggests that there is no defined meaning of ‘adolescence’ globally and curriculum documents refer to a variety of age groups as the ‘middle years’. Education without a defined meaning for ‘middle years’; however, according to the Queensland School Curriculum Council, the middle years are considered to be school Years 5 to 10, typically students aged 10 to 15 years. MYSA, the Australia-wide peak body organisation dedicated exclusively to the education, development and growth of young adolescents, in 2008 released the Position Paper on Middle Schooling: People, Practices and Places, which defines middle schooling as ‘an intentional approach to teaching and learning that is responsive and appropriate to the full range of needs, interests and achievements of middle years’ students in formal and informal schooling contexts’ (MYSA, 2008, p. 1). For this discussion ‘young adolescents’ and ‘middle years’ will encompass all students in the 10 to 15 age bracket or the school Years 5 to 10. The MYSA Position Paper specifies three elements necessary for middle schooling:

1. Clear philosophy relevant to the context

2. Comprehensive range of signature practices to engage young adolescents in relevant, meaningful and challenging learning, along with organisational initiatives to facilitate their implementation, such as:

• higher-order thinking strategies
• integrated and disciplinary curricula that are negotiated, relevant and challenging
• heterogeneous and flexible student groupings
• cooperative learning and collaborative teaching
• small learning communities that provide students with sustained individual attention in a safe and healthy school environment

3. Evidence-based approach with clearly articulated outcomes, such as:

• developing current and lifelong learning attributes
• enhanced academic outcomes
• creation of a love of learning

Of particular note in this state are the signature practices – higher-order thinking strategies and authentic and reflective assessment with high expectations. A central platform of middle years’ pedagogy is development of higher-order thinking that focuses on problem solving. It entails contexts where the thought processes needed to solve problems and make decisions represent a complex level of thinking, whereby students transform information and ideas so as to understand and discover new meaning (Wheeler & Haertel, 1993). By using skills that involve analysing, classifying, organising, hypothesising and concluding students are able to manipulate information and ideas. It is the role of the teacher to provide opportunities for students to engage in such activities, both in the learning and assessing domains. The demands of this century require students with developed higher-order thinking skills, who are able to demonstrate the ability...
to identify the links between diverse concepts. Moreover, they require skills such as planning and organising. Flexible thinking, creative thinking, innovation, problem solving and ability to engage in new disciplines. Students will need to develop and refine these skills so as to achieve in an information-based economy, flooded with technical advancements (Boyd, 2000) and conflicting messages.

Authentic assessment, indicated in the literature as more conducive to the middle years’ philosophy is based upon the premise that assessment should primarily support the needs of learners (Athanasou & Lampaniou, 2005; Brady & Kennedy, 2009; Wiggins, 1989). The word ‘authentic’ is used in much of the literature in this area often with a variety of interpretations. Barratt (1998) proposes that middle school assessment should be authentic in that it directly connects to the curriculum experienced by the students, assesses their level of achievement as individuals, and also assists the teacher in designing more effective teaching and learning experiences. Authentic assessment involves explicit links between the curriculum and the assessment so that the process tests what is taught and leads back to better informed teaching and learning. Chadbourne and Pendergast (2005) concur with Barratt and suggest that middle schools should move away from traditional assessment and exhibitions of student work. However, the delivery and implementation of the new national curriculum indicates that these types of assessment are not awarded the same level of credibility as a means of identifying student achievement.

Education Queensland infers that students who only have access to assessment tasks that require low levels of knowledge and cognition are limited to demonstrations of learning at E or D standard. They suggest that the onus is on the teacher to supply tasks and assessment that offers students access to the full range of standards (DEE, pp. 14-19). The Education and Training Framework identifies that questions requiring lower-order knowledge and/or factual recall – bloom’s lower order of thinking – will offer opportunities for students to achieve a maximum of an E-grade. To achieve an A-grade the assessment task would need to include questions requiring students to demonstrate conceptual knowledge, reflection, reasoning and communication skills in order to compare and contrast effectively higher order of thinking included in Bloom’s continuum. These types of questions require students to use reflection and reasoning tools to move from one representation to another.

If, as Nagel (2010) argues, the adolescent brain does undergo a stage whereby unused synapses are pruned, it is crucially important that higher-order skills such as analysing, evaluating and creating are used regularly so as they are not discarded. Research indicates that adolescents need to be given opportunities to function at the higher levels of cognition (Chadbourn & Pendergast, 2005). Because BRT compartmentalises the graduating levels of intellectual skills and behaviour, it became a valuable analytical tool to be used for the process of analysing whether the Years 5, 7 and 9 NAPLAN 2009 literacy tests display characteristics that benefit the development of the middle years’ student.
Table 1  Bloom’s Revised Taxonomy (adapted from Krathwohl, Bloom, & Masia, 1973; cited in Kohn, 1999)

<table>
<thead>
<tr>
<th>Cognitive levels of complexity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower-order thinking</td>
<td>Remember</td>
</tr>
<tr>
<td></td>
<td>The learner is able to recall, restate and remember learned information.</td>
</tr>
<tr>
<td>Understand</td>
<td>The learner grasps the meaning of information by interpreting and translating what has been learned.</td>
</tr>
<tr>
<td>Apply</td>
<td>The learner makes use of information in a context different from the one in which it was learned.</td>
</tr>
<tr>
<td>Higher-order thinking</td>
<td>Analyse</td>
</tr>
<tr>
<td></td>
<td>The learner breaks information down into its component elements.</td>
</tr>
<tr>
<td>Evaluate</td>
<td>The learner makes decisions based on in-depth reflection, criticism and assessment.</td>
</tr>
<tr>
<td>Create</td>
<td>The learner creates new ideas and information using what has been previously learned.</td>
</tr>
</tbody>
</table>

The lowest level of BRT focuses on basic knowledge recall. At this level, students recall, remember, list, and repeat information. The second level involves students classifying, describing, discussing, identifying, and explaining information; at this level students need comprehension skills for understanding. The third requires students to demonstrate, interpret, solve problems and write about what they have learned in order to apply this knowledge in various domains. The next step involves an increase in sophistication where students are expected to compare, contrast, distinguish, and examine knowledge in various domains, and are able to question and analyse their new knowledge. The next level includes students arguing, defending, supporting, and evaluating their opinion on this information. The sophisticated skills of creating a new project, product, or point of view belong to the final evaluation stage. In view of the assessment of higher-order thinking strategies and authentic and reflective assessment with high expectation, students might reasonably be expected to be challenged at the cognitive levels of complexity where analysing, evaluating and creating are possible. This would align assessment with middle years’ education imperatives rather than as competing interests.

The study

In this study, BRT was used to analyse the literacy component of the 2009 NAPLAN tests administered to Australian middle years’ students (Years 5, 7 and 9). The year was selected for the study as it aligned with the commencement of doctoral candidacy for one of the authors, and serves as a pilot for further work in the doctoral investigation. The items were classified by the authors and researchers using BRT in the relation to the cognitive level of complexity required from students to respond to the questions effectively. One researcher undertook the classification process and the second researcher cross-checked for consistency by randomly selecting a number of items across the data set. The literacy component includes: writing, reading comprehension, and language conventions (spelling, grammar and punctuation) tasks. The writing task was not analysed in this study as it was an open-ended task with little direction that could be assessed in terms of cognitive challenge.

The text analysis identified the term used in the task description, as well as the official expectations in the marking schema used by the assessors. The words/l from within the task and the words highlighting the expectations within the marking guide, were analysed to determine the level of cognitive demand required. The two sections, reading comprehension and language conventions, were assessed by analysing the terms in each question against BRT to determine their respective level of cognitive complexity.

Findings

One hundred and twenty-six questions for each section across Years 5, 7 and 9 were assessed in this study. Table 2 illustrates the distribution between year levels of questions in the reading comprehension and language conventions components of the 2009 NAPLAN tests.

Further analysis of the data revealed the remaining questions required only lower-order thinking skills (remember and understand). These questions require students to receive or recite factual information. Knowledge is provided to the students within the text with students primarily engaged in routine lower-order thinking for much of the testing period. Rarely do they go beyond simple reproduction of knowledge. There is an absence of higher-order thinking challenges students to analyse and manipulate information, as opposed to lower-order thinking that demands only routine or mechanical application of previously acquired information such as listing information previously memorised.

The Year 5 reading tasks, although involving variation of genre, sentence structure and vocabulary, are still well-supported by illustrations. Students are expected, when reading a short narrative, to locate directly stated information, connect and interpret ideas, recognise links between text and illustrations, interpret characters’ nature, behaviour and motivation, and identify cause and effect, which are all skills identified by Bloom as requiring lower-order thinking. The expectations of students when reading other genre differ slightly, but the vocabulary used in the minimum standards is mainly that which is associated with the lower levels of BRT. Table 4 reports the language used to explain task expectations for each genre in the 2009 NAPLAN reading tasks for Years 5, 7 and 9 in relation to BRT. The majority of the task descriptions involve skills related to the two lowest levels of lower-order thinking, where students are required to perform such skills as remember and understand, with few falling into the higher-order thinking skills area.
Table 4  Analysis of language used to determine task expectations

<table>
<thead>
<tr>
<th>Genre</th>
<th>Year Level</th>
<th>Term</th>
<th>Lower-Order Thinking Skills</th>
<th>Higher-Order Thinking Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Remember</td>
<td>Understand</td>
</tr>
<tr>
<td>Narrative</td>
<td>Year 5</td>
<td>Locate</td>
<td>X</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Connect</td>
<td>X</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Recognise</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interpret</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year 7</td>
<td>Identify</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infer</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year 9</td>
<td>Locate</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connect</td>
<td>X</td>
<td></td>
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<td></td>
<td></td>
<td>Recognise</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interpret</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>Year 5</td>
<td>Locate</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connect</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identify</td>
<td>X</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Infer</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year 7</td>
<td>Identify</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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The 2009 NAPLAN language conventions tests were designed to assess the areas of spelling, grammar and punctuation – only the surface accidents of meaning making. All of the 126 questions were positioned comfortably in the lowest two levels of the BRT. The students were expected to identify and locate common grammatical conventions and recognise punctuation. In order for students to reach minimum standards for the spelling component of the test, at all three year levels, they are required to demonstrate performance of lower-order thinking skills, the lowest level of BRT. The test is a measure of whether the students are able to identify and correct errors in frequently used words; remembering the correct spelling. Table 5 reports the vocabulary used to determine the underlying purpose for each task.

Table 5  Analysis of vocabulary used to identify task expectations in language conventions tests

<table>
<thead>
<tr>
<th>Year Level and Terms</th>
<th>Lower-Order Thinking Skills</th>
<th>Higher-Order Thinking Skills</th>
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<tr>
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<td>Year 9</td>
<td>Recognise</td>
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**Discussion**

Advocates of effective teaching and learning for the middle years, including MYSA (2008), urge educators to employ a range of signifying practices in order to provide teaching and learning experiences best suited to middle years’ students. Two practices have been investigated in some detail in this study: authentic and reflective assessment involving high expectations and higher-order thinking. The need for such practices, tailored for middle years’ students, is supported nationally. Yet, using the highly regarded BRT to analyse the NAPLAN test items, NAPLAN provides little opportunity for students to demonstrate higher-order thinking. Furthermore, the genre of the test itself means that it cannot fulfil another of the signifying practices of middle years’ education, which is ‘authentic and reflective assessment with high expectations’ (MYSA, 2008, p. 1). This style of task typically precludes authenticity as understanding of the students’ world within and beyond the classroom requires the development of relationships between the test author/s and the students who are sitting the test, and is often context, site and/or individual specific. Hence, both of the key signifying practices associated with assessment in the middle years were not prominent in the analysed NAPLAN test; therefore, participation in NAPLAN testing in the middle years in 2009 would not have aligned strongly with the principles of middle schooling. Importantly, the test itself is not the only commitment made to the test regime, with many schools allocating considerable time in the weeks preceding the tests to develop test wiseness. Teaching and learning opportunities are likely to mirror the test in order to prepare students adequately for what is anticipated in the tests.

Importantly, NAPLAN does not exist in isolation as an assessment regime in Australian schools, so it is unreasonable to expect it to be an ideal model for middle years’ assessment. However, given that it is used as a benchmarking and reporting mechanism to determine individual, school, state and national levels of literacy and numeracy achievement, it constitutes a high-stakes assessment practice in Australian schools and one that is driving pedagogical practices in the classroom. This high-stakes, full-cohort, standardised, norm referenced, paper-based test regime has led to an assessment-driven approach to curriculum (Brown, 2008; Chadbourne & Pendergast,..
than one or the other, being seen as assessment practices, with each of a collaborative approach to finding highlights the importance of such an assessment tool. This world limits the authentic nature of relationship between the test of the NAPLAN test format cognitive capabilities. The nature of tests as not requiring higher-order included in the 2009 NAPLAN and reflective, non-competitive strong alignment, and may even be NAPLAN tests are revealed as not affecting the opportunity to head in this knowledge and not to be seen as a panacea for reforming the education system.

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References


Silence is golden – The loss of solitude in schools and culture

Emma Lowry

Introduction

‘Those who know do not speak, those who speak do not know’ (Lao Tzu)

Susan Cain (2012) author of Quiet: The Power of Introverts in a World That Can’t Stop Talking, refers to cutting edge research and neuroscience to talk about how undervalued introverted personalities are in western culture. She debates the notion of western culture subscribing to the Extrovert Ideal. We know that recent educational trends lean towards collaborative learning and open learning spaces; students are encouraged to voice their opinion and to be positively and actively engaged in the world around them. What Cain suggests, is that in order to survive in such a competitive environment it makes sense that some students may feel the need to be, in fact, ‘extroverted,’ which is actually quite concerning.

To help put this into a better context, and to better explain how this will relate to what I want to discuss, my thoughts initially stemmed from the Engagement to discuss, my thoughts initially how this will relate to what I want to reach their creative potential?

Firstly, I would like to dispel two common introvert misperceptions. The first myth is that introversion is the same as being shy. Without doubt, there are many introverts who are shy, but there are also many extroverts who are shy. Shyness is mostly linked to fear or anxiety around social contact, whereas introversion is associated with a person’s comfort in regard to various levels of stimulation (Sparks, 2012).

Another myth is that being afraid of public speaking means you are an introvert. This is not true. The American National Institute of Mental Health (2012) states that 75% of people have a fear of public speaking and this affects extroverts in the same way as it affects introverts.

What is introspection?

To go back a step, while the terminology of introversion and extraversion is commonly understood, I acknowledge that many people would find it difficult to classify themselves into one of these two groups; we are all so individually unique – how can we all fit into two categories? Even Carl Jung who initially explored the concept in the 1920s said that there is no such thing as a pure introvert/extrovert, and there is no clear-cut mould for either. But what exactly does introversion refer to? How do we know if we are an introvert, an extrovert, or if we lie in the middle of the spectrum, and are classified as an ambivert?

One aspect that is often missing when focusing on the collaborative learning environment however, is that of ‘solitude’. According to the famous research psychologist, Anders Ericsson, ‘solitude’ is the key ingredient, which enhances exceptional achievement. He identified that the best musicians spend most of their music-related time practicing in solitude. Elite athletes often spend a high percentage of their time in solitary practice, and college students who study by themselves learn more over time than those who work in groups. When one is alone, one is able to engage in ‘Deliberate Practice’, which Ericsson claims is the key to exceptional achievement. (Ericsson, Krampe, & Tesch-Romer, 1993 p. 363-406)

I have taken a liking to this notion, and I think it is worth further exploration. Not dissimilar to what is taught in the Year 8 Philosophy of Learning, Deliberate Practice is about identifying the tasks or knowledge that are just out of your reach and striving and revising accordingly to improve cognitive processes. Best conducted alone, it takes intense concentration. Motivation is required, and must come from within as it involves working and practicing on the task most challenging to you personally. For obvious reasons, this is difficult in a group environment. And in the busyness of the current world we live in, I wonder how many of our students dedicate time for 100% pure concentration, for an extended period of time, in a quiet environment? Is this something we should be considering as part of our future needs? Do we need to create the time, and create such a space?

Past and present, well-known creative introverts Marie Curie, Van Gogh, Dr Seuss, JK Rowling and Steve Wozniak to name a few, are experts at Deliberate Practice. Introverts prefer to work individually and solitude is what they crave. If we consider this notion in the actual classroom – while introverts know to try and seek out quiet space, it is actually the extroverts who unfortunately often fail to realize their true talents. The quietness and the time needed to practice music or study maths requires a solitude that they try to avoid (Cain, 2012b, p. 83).

A key point from this though, is that exceptional performance depends not only on Deliberate Practice, but also the right working conditions. Introverts, in particular, need extra quiet and privacy to do their best work, and in contemporary learning spaces this can be increasingly difficult to find.

What can schools do to support these students? There are two aspects worth considering. Firstly, the problematic nature of open-plan learning places, and secondly, the lack of solitude for introvert Deliberate Practice.

Open plan offices and learning spaces

Overnuminous, Zhao (2008) suggests creating a balance of shared space and communication opportunity along with specialised work pods and closed offices. The current benchmarks of new office design are flexible, in layout, with a mix of solo workspaces, quiet zones, casual meeting areas, cafes, reading rooms and computer hubs. These choices enable concentration and team building, creating more of a balanced and productive workplace.

Taking this research into consideration, I would like to now go back to the point about what schools can do to ensure that introverted students are given the opportunity for quiet and privacy to do their best work. The following notions could be worth considering when designing space and curriculum for 2015:

- Offer a flexible learning space with moving doors and walls, for students to work either individually, or in small groups of two or three.
- Having scheduled quiet time during the day, away from all classroom teacher, how could I better support exceptional scholarship in order for students to contribute to their world with imagination, wisdom and integrity?

Importance of solitude

- In my role as Head of House and BGGS is very proud of the modern learning places we offer our students. On our website, Felicity Williams talks extensively about how the school has embraced educational trends, and is vanguard in designing spaces that allow students to be engaged through modern communication technologies and collaborative learning. The architecturally acclaimed CLC and the new G Block incorporate flexible classrooms and versatile furniture configurations to accommodate the move towards collaborative learning. Advantages include students taking ownership of their own education, and developing the necessary skills of leadership, teamwork, and problem-solving, which reflects the world of business they will enter once they leave the security of the white picket fence.

One workplace example of this is ‘Deliberate Practice’ which is able to engage in ‘Deliberate Practice’, which Ericsson claims is the key to exceptional achievement. (Ericsson, Krampe, & Tesch-Romer, 1993 p. 363-406)

- How could we provide better opportunities for all students to reach their creative potential?

To help put this into a better...
distractions, for thought and reflecting. This would support the Philosophy of Learning course and could be time-tabled, or at least factored in when teachers do lesson planning. This will re-energise introverted students as opposed to them being over-stimulated, all day.

• Design the timetable to include extended time for Deliberate Practice. For the senior grades this would be important to ensure that students are given uninterrupted time for pure concentration. If Year 7s are to do trans-disciplinary subjects and work on creative projects, they too may require extended periods of uninterrupted time.

Creativity and group work

The rise of the internet has seen an increased level of group work – online and face-to-face. Online collaboration, when managed properly has the potential to be highly effective but Cain (2012b, p. 89) implies that we have become so impressed by the power of online collaboration that we have come to over-value all group work at the expense of solo thought. Group work can suppress productivity and deprive school children and employees of their creative potential.

When talking about creativity, research indicates that idea creation is best done individually. Studies show that when people work on their own, more ideas are produced of equal or higher quality than when working collectively. Similarly, as the size of the group increases, the group performance decreases. Groups of four generate better and more creative ideas than groups of six, who do better than groups of nine. Organisational psychologist, Adrain Furnham says, ‘If you’ve had talent and motivated people, they should be encouraged to work alone when creativity or efficiency is the highest priority’ (cited in Cain 2012b, p. 89)

Groups are notorious for following the opinions of the most dominant or charismatic person, yet there is no correlation between being the best talker and having the best ideas. Studies show that quiet and loud people have the same amount of good, creative ideas, but it is the loudest person who gets heard the most. To maximise creativity, it is better for everyone to go off by themselves, generate their own ideas away from group dynamics, and then come together as a team to talk through the ideas in a well-managed environment (Cain 2012a, ).

For introverts, the best approach for group work in the classroom is to have small groups of two or three, and clear roles for each student. In class discussions, encourage the quiet introverted student to contribute ideas earlier, rather than wait until everyone has spoken and the tension has been built up internally. Online discussions are also wonderful platforms for introverts to voice their opinion. The way we communicate and interact via social media and the internet is positive for introverts as it gives them the time and space they require to think, and it is a more passive way of contributing (Sparks, 2012).

Sparks (2012) reiterates Cain’s research by stating that academic outcomes for introverted students can be improved if we place less pressure on them to be outgoing, and more time to think and reflect. From a teacher’s point of view, giving opportunities for students to contribute via small groups and online will not only empower the introverts, but it will help develop their confidence and their ability to contribute to the wider world around them (Cain 2012a, ).

Conclusion

While the information I have presented is relevant for introverts, it is also extremely important for extroverts so everyone can work towards their fullest potential. My aim in presenting this research was to discover how students could benefit from their creativity, and how I could better support exceptional scholarship in order for all students to contribute to their world with imagination, wisdom and integrity.

In summary:

• At least one-third, possibly one-half of our population is introverted, whether they appear extroverted or not.

• Cultural differences will have an impact on where students lie on the introversion / extraversion spectrum. While our education system values collaborative learning, class participation and speaking in public, we should not forget the importance of a student’s cultural background and their values. While it is vital for these students to develop the skills they need to go and survive in our society, it is also necessary to recognize their needs and nurture their sensitivity.

• Silence is golden. Solitude is the key for deep thinking for both introverts and extroverts. Uninterrupted time, for pure concentration enhances exceptional performance.

• Office space and learning space should provide opportunities for collaboration and socialisation as well as solo space to optimise productivity.

• Creativity best comes from individual thought rather than a group approach. Use group work in a productive way, by allowing a considerable amount of time for individual idea creation first.

• Introverts should be encouraged to participate in group work, but it should be in small numbers, and be well managed.

• Teachers should ensure there are plenty of different platforms for students to be engaged. Online collaboration, discussions and forums are extremely conducive for introverts.

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Teacher aides - The overlooked partner in teaching: their potential for middle years of schooling classrooms and your role as teacher

Elizabeth Tatum

Abstract

Collegiate working, as reflected in the signature practices of middle schooling, is an important part of teamwork in education (Carrington, 2006), yet one colleague is often overlooked. That colleague is the teacher aide. This article outlines three approaches to working with teacher aides - the gracious host, the line manager and the collegiate relationship - and identifies some of the problems teachers and teacher aides have faced in working together as part of an educational team. Given their training, middle years of schooling practitioners are in a unique position to receive the benefits collegiate working brings. To aid teachers, the collegiate relationship model is outlined through a case study and participant dialogue and is given form and direction through Donna Pendergast, Rod Chadbourne and Susan Danby's (2009), eight clearly defined steps to collegiate working with teacher aides. This exciting way forward is presented as both an achievable alternative to other team working models and as a challenge to middle years of schooling practitioners.

When you think of a team in education do you think of teacher teams, or even teacher/student teams? If your idea of an education team does not include a teacher aide you would not be alone. Literature suggests that this invisibility of the teacher aide occurs in schools across the United Kingdom (Watson, Bayliss & Pratchett, 2013), the United States of America (Goessling, 1998; Marks, Schrader & Levine, 1999), and in Australia (Bourke & McCrigration, 2007; Hayward & Ford, 2007). One possible explanation for the invisibility surrounding teacher aides can be found in research indicating that the majority of teachers are not trained in how to work with teacher aides and, as a result, are hesitant to supervise teacher aides and unprepared to work effectively with them (Chopra, Sandalow Lucas & French, 2011; Picker & Gerlach, 2003; Russell, Webster & Blatchford, 2013). You may feel this does not apply to you as you have a good, friendly working relationship with your teacher aide/s. Daniel Kain (2006) argues; however, that the key to effective teaming in education is complementary skills, not friendly relationships. As a middle years of schooling (MYS) practitioner you have an advantage; your training holds the key to a way forward that offers great benefits to you, the teacher aide/s you work with, and your students. Before looking at the MYS approach, however, it is worth outlining key teacher/teacher aide relationship models and some of the issues surrounding these approaches.

Michael Giangreco (2003) identifies the early approach to teacher/teacher aide education teams with his designation of the teacher as the 'gracious host'. This seemingly idyllic situation is short-lived. Alan Sweet (1977) warned of the danger of teachers continuing to manage and teach their class in the same manner as before and providing the paraeducator with just clerical duties. According to Sweet, with this approach the teacher becomes a 'paper teacher' and will 'ultimately have even less contact with students than before' (p. 123). Other issues with this approach were noted in a booklet entitled the Teacher Aide: Teachers (sic) Notes, produced by the then Department of Education Queensland in 1977. The booklet contains the statement, 'The positive purposes of a teacher aide program have some times [sic] suffered misuse and abuse' (p. 1). Teachers are told, 'It is important to remember that aides are part of a teaching team. They are not odd-job men' (sic) (author emphasis) (p. 14). It is here we see the introduction of a new approach to the teacher/aide team, for the booklet goes on to advise the 'busy teacher' working with a teacher aide 'to include in his/her role good managerial and administrative practices in relation to others, practices which he [sic] may not have had to exhibit while following his [sic] own individual classroom program beforehand' (p. 15).

In this new approach to the education team, teachers leave behind their role as gracious host and assume a management role. In this new role teachers are required to become front line managers, involved in allocating technological, fiscal and human resources (including teacher aides) to meet student needs (Picker & Gerlach, 2003; French 2003). The teacher is charged to think of the teacher aide as a team member but, also, act as a manager. The central problem with the management model for the education team is that the great majority of teachers were not, and are still not, trained in how to work with teacher aides (Vincett, Cremin & Thomas 2005; Russell, Webster & Blatchford 2013). With no training in this area and the general instruction that teacher aides are to work 'under the direction of a teacher' (Department of Education, Training and Employment, 2013) the management model becomes problematic, for the teacher aide becomes a 'resource' to be managed and their contribution, their voice is diminished or not heard at all in the education team.

Providing a voice for teacher aides is a key component in the collegiate approach to teacher/teacher aide teaming and this is where MYS comes to the fore. In this approach, the relationship between teacher and aide is collegial in that they work together as equal partners, each contributing substantially to the education team, creating synergy and greatly improving the educational outcome for the students (Briggs & Cunningham, 2009; Conzemius & O’Neill, 2001; Parvey, 2008; Pendergast, Chadbourne & Danby, 2009). As Sue Briggs and Sue Cunningham (2009) put it, “The teaching assistant role is no longer inferior to that of the teacher. The days of the ‘ancillary worker’ are long gone, and the job of teaching assistant is rapidly gaining status” (p. 24). The ideals of this latter model are reflected in the signature practices of middle years schooling involving collaborative teaching (Carrington, 2006; Cobb, Brigham & Aguilar, 2006) and in Standard 7 of the Australian Professional Standards for Teachers (2012), where teachers are required to engage professionally with colleagues. What then does this new collegiate role look like in practice?
The following is a snapshot of how a teacher and teacher aide team work in synergy from my own research into teacher/teacher aide education teams (Tatum, 2009). Kym and Peter (not their real names) work together as an education team. Peter is a teacher with 15 years’ experience and Kym is a teacher aide with 12 years’ experience. They plan together and work together, creating a synergy for student educational outcomes. By combining Kym’s expertise in the planning, Peter is able to draw on Kym’s knowledge, experience and community connections. For example, Kym knows where and how resources might be obtained or procured, whom to contact if Peter would like an outside expert to talk to the students, and offers suggestions based on her knowledge (gained through both training and experience) of student behaviour and ability. In the classroom, their roles complement each other. Peter might work with a small group of struggling learners, while Kym takes the rest of the class through an agreed upon activity. Kym organises and sets up the material for a science experiment, while Peter outlines the experiment and the necessary safety requirements to the students. Both Peter and Kym assist students with the science experiment. When asked to describe their working relationship, Peter responded by saying, ‘...we work as a team. There is no other way with me ...’ You can’t work as individuals – it is classroom management.’ Kym responded by saying, ‘Definitely we work as a team. There is mutual give and take. Our working relationship is comfortable, easy, enjoyable, relaxed.’ When asked what his role was within the team, Peter replied, ‘We are pretty much on an even footing – I’d say 51 to 49. We are definitely partners. Technically, I know I am the supervisor.’ Kym stated that she saw Peter as the ‘boss’, ‘What he says goes (but) he always says, ‘What do you think?’ He values my opinion.’ Both Kym and Peter stated that open communication and respect for each other were the key components in making their team function so well. Their planning meetings occur every day for approximately 10 to 15 minutes before school starts. Longer planning meetings, such as for issues related to term planning or special events, occur during spares, over lunch or after school; however, these might only occur a few times a year.

A key component to their team’s success is having the structure and time to communicate. Without allocated time to communicate, organise information, and handle the many changeable items that come up in a classroom situation, much is left to guesswork, which can often cause difficulties and communication breakdowns (Fitzell, 2010). Blatchford, Russell and Webster (2012) found that schools routinely benefited from teacher aide ‘goodwill’ in the form of unpaid work, as teacher aides regularly arrived early or left late in order to have valuable liaison time with teachers’ (p. 54). My own research confirmed this. What then is the new role of the teacher? According to Pendergast, Chadbourn and Danby in their article Early and Middle Years of Schooling (2009), developing this professional, collegiate and productive relationship with a teacher aide means that, in line with her or his role as leading team member in the teacher/teacher aide team, the teacher needs to:

- invite the teacher aide to attend and participate in team meetings and social events
- involve the teacher aide in planning, not just implementing individual learning plans
- show the teacher aide the daily work pad each morning or evening
- consult the teacher aide on student behaviour management
- use the teacher aide as a critical friend, a person to bounce ideas off
- ensure that the teacher aide receives adequate induction and professional development
- ask the teacher aide to supervise small groups and the class when appropriate
- avoid taking a laissez-faire approach of providing the teacher aide with little direction on the nature of their work or leaving them with almost complete responsibility for students with special support needs (p. 291).

While the focus of Pendergast, Chadbourn and Danby’s article is on supporting students with special needs, similar or identical collaborative strategies are outlined in research reporting on a variety of teacher/teacher aide teams (Fitzell, 2010; Nevin, Villa & Thousand, 2009; Russell, Webster & Blatchford, 2013). The key component of each outline of collaborative strategies in the new collegiate model is the inclusion of planning time. The importance of time for planning was recently given greater emphasis in Australia with its inclusion as one of the four key elements to excellence in teaching and student performance in Gonski et al’s report Review of Funding for Schooling—Final Report (2011).

Middle years of schooling has led the way in new directions for adolescent education. With its focus on Years 5 to 9 and straddling both primary and secondary schools, middle years teachers are in a unique position to inform the direction of the new collegiate teacher/teacher aide team. The signature practices of middle years (and the focus on collegiality in the professional standards for teachers) mean that middle years teachers are in a unique position to lead in another field, the field of teacher/teacher aide teams. Whether or not your school suffers from a lack of incorporation of middle years concepts you, as a trained middle years teacher, know how it should be done. What are you waiting for?

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References
The emergence of life story in adolescence

Nick Evans

Abstract

The life story as identity is an important concept in the formation of self. Identity, dependent on interaction with others, is constantly evolving. Individuals living in modern societies begin to organise their lives in terms of self-stories in late adolescence (McAdams, 2004). Meanings and values attributed to self-stories are interpretative and are therefore highly subjective. Problems arise in clarifying defining moments, due to their subjective, interpretive nature. It could be argued the maturing self can only construe in a limited number of ways, as is dictated by limited life experiences. The evolving story of the self can, paradoxically, be negatively affected by the self-narratives that create the life story. Any event has a number of potential explanations or interpretations. The internalised narrative is not necessarily an accurate reflection of the event, thus the individual. Is moderating of internalised narrative a missing element in the development of the self? For us, as educators, could moderating internalisations through dialogue lead to greater clarity in the development of life story?

My field of research concerns the lives of adolescent males. Adolescence is a period of acute physical and psychological growth. Boys begin to question: themselves, their place in society, their potential future, their past, their parents and teachers. Events begin to link in their lives and the beginnings of a certain coherence develops. In short, they begin to articulate who they believe they are, or become aware of the possibility of who they can become. Adolescents experience narratives in a very personal, human development: an awakening of the self. The process by which this occurs is through narrative or self-stories. Jerome Bruner tells us that the stories people narrate to make meaning of their lives, beginning in adolescence, define the struggle of identity (Bruner, 1996). The possibility of a life story helps us to understand the process by which adolescence is a period of awakening of the self.

Richard Tarnas suggests reality is dependent on those experiences of the individual. The mind is not passive, rather, it is actively structuring reality, so the interpretive structure of experience is always prejudicial (Tarnas, 1991). Immanuel Kant proclaimed what has been called his ‘Copernican Revolution’: as Copernicus had explained the perceived movement of the heavens by the actual movement of the observer, so Kant explained the perceived order of the world by the actual order of the observer (Kant, 1781). How does the individual fit within this changing, phenomenal world? How can we make sense of self? How is self, affected within this changing world? Paul Ricoeur asserts personal identity is a narrative identity. He suggests sense of self is only in and through involvement with others and in dealing with others a role is not simply enacted. Narrative identity is mobile, unfixed and dependent on interactions with others. Dan McAdams tells us narrative identity refers to an evolving story of the self. His life story model of identity, suggests identity is constantly changing, as individuals living in modern societies begin to organise their lives in terms of self-stories in late adolescence and young adulthood. Meanings and values attributed to those scenes are very much dependent on individuals, and are therefore highly subjective (McAdams, 2001). Therefore, self-stories are shaped by the meanings and values attributed to the scenes, which are dependent on interactions with others. Problems arise in clarifying defining moments, or scenes, due to their subjective interpretive nature. It could be argued that the maturing self can only construe in a limited number of ways, as is dictated by limited life experiences. This evolving story of the self can, paradoxically, be negatively affected by the self-narratives that create the life story. Any event has a number of potential explanations or interpretations. The internalised narrative is not necessarily an accurate reflection of the event, thus the individual. Is moderating of internalised narrative a missing element in the development of the self?

Monisha Pasupathi and Emma Mansour (2006), in their paper, Adult Age Differences in Autobiographical Reasoning in Narrative, suggest a salient feature of life stories is self-analysis, in how individuals have changed and stayed the same across major life events. The significance of a life story is to have a connection and purpose within the world. Life stories are subject to selectively using aspects of experience and construing past and future to make life meaningful. Dan McAdams (2004) tells us that life stories reflect internalised identity, including cultural values and norms, such as assumptions about gender, race, and class. In adolescence people begin to put their lives together into self-defining stories. The subjective nature of analysis and internalisation of meaningful events remains problematic. Using narrative as a way of interaction, allows adolescent boys to clarify and quantify experience. Thus, internalised life stories are moderated or filtered by experience. Could moderating internalisations of self-narrative, through dialogue, lead to an ability to internalise events leading to a positive effect of narrative, and therefore a clearer understanding of life story?

Autobiographical reasoning

McLean and Pratt (2007) suggest autobiographical reasoning results in a sense of personal identity through the tendency to draw conclusions about the self from autobiographical episodes. Tilman Habermas (2010) sells us repeated use of autobiographical reasoning may lead to a knowledge structure, the life story schema, which relates to life as a whole. Life story schema is activated and used in autobiographical reasoning, which may lead to a knowledge structure created from individual elements, stored and used as schema. Autobiographical reasoning creates links between remembered events and other distant parts of one's life and to the self and its development. It refers to the remembering subject's life as the relevant frame of reference, thereby implying the life
memories, correlated with aspects coherence for significant life composite measure of narrative & McAdams (1999) found, a (Habermas, 2010)).

((Habermas et al., 2009) in Silveira, 2008; Habermas et al., narratives ((Habermas & de and structure of endings of life participations in biographical practices. In T. Habermas (Ed.) The development of autobiographical reasoning in adolescence and beyond. New Directions for Child and Adolescent Development, 132, 1-17.


Adolescence is a period of acute growth. Boys begin to question most aspects of their lives. They begin to articulate who they believe they are, or become aware of the possibility of who they can become. Research has suggested autobiographical reasoning results in forming a sense of personal identity through the tendency to draw conclusions about the self from autobiographical episodes. Studies have also shown the development of autobiographical reasoning reflects wellbeing. I would suggest the subjective nature of analysis and internalisation of meaningful events remains problematic. The potential remains for the internalisation of unreliable and negative schema, based on a limited world view.

In education, using dialogue, internalised life stories can be moderated. This allows for clarification and quantification of experience, which leads me to pose my questions: could moderating internalisations of self-narrative, through dialogue, lead to an ability to internalise events leading to a positive effect of narrative, and therefore a more positive understanding of life story? Could the development of autobiographical reasoning assist adolescent boys in wellbeing?

Conclusion

Adolescence is a period of acute growth. Boys begin to question most aspects of their lives. They begin to articulate who they believe they are, or become aware of the possibility of who they can become. Research has suggested autobiographical reasoning results in forming a sense of personal identity through the tendency to draw conclusions about the self from autobiographical episodes. Studies have also shown the development of autobiographical reasoning reflects wellbeing. I would suggest the subjective nature of analysis and internalisation of meaningful events remains problematic. The potential remains for the internalisation of unreliable and negative schema, based on a limited world view.

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References


Abstract
A conference attended at the University of Western Australia in November 2012, sparked the successful implementation of Thinking Science at Mount Alvernia College, Brisbane. The Thinking Science program was initiated through research conducted by The Cognitive Acceleration through Science Education (CASE), out of London. Professor Mary Oliver at the University of Western Australia engaged a laboratory full of secondary science teachers with relevant theory, thought provoking investigations and interesting and involved professional debate. The in-service provided teachers with the necessary physical and intellectual tools to successfully implement the Thinking Science program in Middle Schools. Having taught both genders, it has been observed that the attitudes, confidence and motivation of girls in the science classroom differ greatly from boys. The Thinking Science program with its carefully planned sequence and educational theory, is allowing girls to appreciate, manipulate and master scientific content. The girls’ performance and attitudes at Mount Alvernia College will be mapped and a standardised test conducted prior to the 30 lessons to act as a performance benchmark. This report aims to consider the relevant research that has prompted the need to shift the way in which science is taught and learned, and to look at theory that has driven the design of Thinking Science. The report delivers a proposal for Middle Schools to follow and outlines recommendations to ensure success.
Background research

If Piaget and Vygotsky were sitting in the teachers’ lunch room, they would be planning their next Thinking Science lesson: one that would engage, empower and challenge their students. Therefore, it would require a question that stumps them, a collective brain to provide a solution, and a mindset to recognise how the problem was solved. We have since recognised this as cognitive conflict, social construction and metacognition.

The Cognitive Acceleration through Science Education (CASE) program was developed at King’s College, London, UK and published commercially as Thinking Science. It was developed as a result of a survey of the cognitive development levels of 14,000 ten to sixteen year olds conducted in the 1970s (Adey, Shayer & Yates, 1989). Known in the UK as ‘CASE’, the school science intervention program has accumulated evidence on the effects of the program, both on students’ cognitive development and school achievement. These findings have shown that it is possible to improve high school students’ achievement in science, with evidence of long-term, far-transfer effects, high validity and reliability measures (Shayer & Adey, 1981). Concrete, operational and formal learning approaches are perhaps the basis of the lesson design. Another strong influence on the lesson development is Vygotsky. The Russian psychologist coined the term zone of proximal development and understood a learner to be capable of much greater things if given the chance to socially construct a solution through the aid of a mediator and encourager who could frame the problem. Vygotsky claimed that instruction was of no use if it was not followed by development and social construction (Adey, Shayer & Yates, 2001). The program’s researchers have based their five pillar model on these theorists. As a result, each lesson flows through the pillars of: concrete preparation, cognitive conflict, construction, metacognition and bridging. It is the bridging that allows meaning and relevance to be gained and this knowledge to be transferred to areas of the curriculum.

The pillars of thinking science

To facilitate a shift in science education, Thinking Science suggests that there are major pillars of student achievement in science: cognitive conflict, peer construction and metacognition (Saffin, 2012). In these lessons, cognitive conflict is introduced to get the students to question their ideas and prior learning experiences. This is introduced by firstly giving concrete ideas that are aligned to easily accessible content that is accepted by the student. Cognitive conflict throws a ‘spanner in the works’ and promotes a social construction of the problem. Partners, small groups or an entire class are required to exchange ideas and reasoning until consensus is reached and the problem is solved. Metacognition is required to discover how the class arrived at the solution and how individuals contributed to group success. These processes become the essential phases of a Thinking Science lesson. The Piagetian ‘hook, line and sinker’ approach is also embedded in the Thinking Science Program. The 30 lessons have a structured progression, or schema to navigate through the scientific content. These are termed as reasoning patterns and involve: variables, classification, ratios/proportion, inverse proportion and equilibrium, probability and correlation, and abstract models.

Factors affecting student achievement in science

Research is confirming that adolescent girls are unmotivated, dissatisfied and have low confidence when it comes to participating and engaging in the science classroom (Davis, 2008). Girls are not always forthcoming with responses, and can be reticent to try new things and use unfamiliar equipment. They can also lack the skills to question set ideas and to develop an inquisitive and enquiring approach, which is fundamental in science learning. A further study (as cited in Davis, 2008) shows that the lack of self-confidence is generally not from a lack of achievement, as compared with boys, but nevertheless, it translates to a loss of interest in science with a knock on effect in the workforce. Simply put, girls underestimate their scientific ability and their teachers must endeavour to understand why.

Teachers of middle school see diversity in their students’ cognitive ability at the largest level (Gordon, Smith, & Oliver, 2013). Adolescent learners do not develop this cognitive ability equally and also cannot tap into the same source of concrete understanding. For this reason, science teaching needs to be rich enough and diverse enough to allow all students in the room to take part and benefit from the lesson. The reasoning patterns that form the program design allow for this diversity: since all learners, no matter their level of maturation, can in their own ‘learning space’ develop the required reasoning and metacognitive function.

Changes in pedagogy

The success of the lesson requires the teacher to move away from traditional classroom instructional methods. Instead, the teacher is challenged to facilitate and guide the students through their own thinking, conversations and decision making – not always so easily achieved. The difficulty lies in the fact that many teachers naturally want to steer the lesson towards the answer and students quickly learn that there is only one correct answer for everything; that is, the one the teacher has. Thinking Science endeavours to train the teacher to use cues and questioning to engage and facilitate student-based conversation and to promote intrinsic learning, rather than to direct the thinking and learning. Students should show a more natural progression towards the transfer of their knowledge and skills from the Thinking Science classroom to the regular classroom when teachers act as the facilitator. Additionally, there is no reason why these skills cannot be transferred across to any other subject.

‘Critical and creative thinking’ is one of the general capabilities of the Australian Curriculum, although it is not clearly articulated how it is to occur (Gordon, Smith, & Oliver, 2013). The Thinking Science program targets these aspects while allowing evidence for these capabilities to be ascertained and collected. Therefore, taking the 60-70 minutes, where Australian Curriculum is to be taught, is certainly warranted.

Factors affecting teacher facilitation in science

Many teachers today are using dated teaching practices that focus on students gaining a narrow bank of knowledge, rather than a skill set or a frame of mind. Thinking Science lessons aim to re-train teachers to instil in their students the desire to...
be inquisitive; questioning the physical world around them and seeking their own solutions to phenomena. The scientific method of fair tests, observations, inferences and predictions can be carefully explored in a reasonable manner when students navigate their own way through their learning process. Teachers must be prepared to encourage student participation by creating a safe environment, fostering peer construction by using questioning techniques to keep conversation flowing, and steering the students through metacognitive processes. What drives the students is the objective of solving the cognitive conflict; what rewards the students is the knowledge that they arrived at the solution without the teacher. This is empowering for the students (and teacher) and this notion should become the crux of all Thinking Science lessons and the critical objective of the teacher.

Teachers require a specific pedagogy to make the Thinking Science lessons work. As the principle behind these lessons lies in student-centred learning and metacognitive processing, teachers must take a ‘back seat’ and let go of their desire to control and intervene in the small group discussion. Teachers are encouraged to modify their own responses to students’ ideas and it is suggested that the teacher does not automatically give positive reinforcement for a correct answer. Instead, it is far more valuable to direct the response back the class.
for feedback or to seek other ideas. This at first is more than likely to be difficult for both teachers and students, but very quickly, students adapt to the ‘thinking space’. Such neutral responses to keep the conversation going may be, “What does everyone think of that response?”, “Can anyone add to that?” or “Have we now solved the problem?” It is best to avoid, “That’s correct”, as it tends to give an abrupt end to the learning mainly because the students see a correct response as a dead end. Worse still is the overused teacher response of, “That’s not the answer I was after”, for this has the connotation of there being just one solution – that of the teacher. The students will need to be reprogrammed to accept this form of question so they will still participate even if only a poker face or neutral response is granted.

Implementation of ‘Thinking Science’

In order for Thinking Science to be a successful initiative at Mount Alvernia College (under the department coordination of Tim Smith), a number of measures and practicalities need to be put in place. Firstly, teachers of Years 8 and 9, in the first instance, need to understand the educational philosophies and theories behind the program. Secondly, they need to accept that these lessons are demanding and challenging for teachers, and lastly, that they require a specific pedagogy that will not come naturally for some.

In 2013, Thinking Science was implemented for Year 8s and will continue for that cohort into Year 9. In 2015, the program will be implemented in Year 7, becoming a fixed program for Years 7 and 8. The 30-lesson program will comprise roughly 15 lessons per year (one lesson per fortnight), beginning with a base line diagnostic test and concluding with a final test to map improvements. Both tests are externally graded by the University of Western Australia, with data returned to the college. In this case, a member of our staff who attended the same conference had graded the base-line tests, using an appropriate guide.

Recommendations for successful implementation

It is recommended that the following points be considered when implementing a Thinking Science lesson:

• Teachers must carefully view the lesson outline and may even prepare a script showing teacher prompting and anticipated student responses.
• Teachers must be collaborative in their planning and implementation of the lessons by feeding back to each other on the successes and/or failings of each lesson.
• Each lesson begins with a ‘hook’ to establish student engagement and relevance.
• Each lesson uses the phases of cognitive conflict, social construction and metacognition.
• The teacher must introduce the relevant key words.
• The teacher guides the students through these phases according to observations of the group.
• The level of content and complexity of the lesson progresses based only on the highest level of cognitive operation of the group.

Benefits of the thinking science approach

The Thinking Science lessons are not to be taught with the objective of aligning with Australian Curriculum. Instead the program runs parallel to such a curriculum and is intended to support the students in their access to themes in their regular classroom. It is expected that teachers and students will draw on these lessons as examples for where they solved and understood phenomena. Piagetian theory would have a teacher believe that metacognition occurs through distinct stages and that formal operations are reached through internalising or processing what the student has done after any experimental conduct takes place (Inhelder & Piaget, 1958).

Through Piagetian research it is also understood that the construction of knowledge is fuelled by the need to resolve conflict between prior knowledge and new information (Saffin, 2012). It is essential that teachers give opportunity to allow students to see this bridging of new and old knowledge in order for them to put the ‘pieces together’, so to speak. It is anticipated that Year 8 students at Mount Alvernia College will find the Thinking Science lessons easily complement particular content in regular lessons, and across different subjects.

The rationale for implementing CASE at Mount Alvernia College is two-fold: to improve students’ thinking and to improve the quality of teaching. The Australian Institute of Teaching and School Leadership, through its National ‘Teaching Standards, presents an opportunity for classroom teachers to engage with research through a rich program of professional learning, prompting collegiality, a shared language around student learning and how it will be best fostered. Simply put, the Thinking Science program will be a short-term investment for a long-term gain, all the while supporting professional growth of teachers and opportunities to reflect on our own and others’ practice through classroom observations. In short, it will support the teacher to promote and develop students’ thinking, confidence in problem solving and metacognition.

The attitudes that are developed in the early years of secondary school are vital (Whitelegg, 1992). At Mount Alvernia College, the Science Department is continuing to work towards countering a somewhat lack of confidence in girls’ understanding of science through the use of the Thinking Science program and its engaging and thought-provoking mode. It is believed that interest, confidence, knowledge and perceived importance of science will improve as a result of the pillars and sequencing of these sort lessons. Science is of crucial importance in our modern society, and consequently, the education of middle school girls in the area of science is of fundamental importance to the future of the next generation of women.

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References


Mt Alvernia, Brisbane, invites Middle School teachers of Science and their Heads of Department to the inaugural Thinking Science Professional Learning Workshop on 1st and 2nd of August.

Cost and details to be confirmed.

For more information on the Thinking Science Program or to express an interest in the upcoming workshop, please contact Andrea Kerr at kerra@mta.qld.edu.au

DATE CLAIMER

Mt Alvernia, Brisbane, invites Middle School teachers of Science and their Heads of Department to the inaugural Thinking Science Professional Learning Workshop on 1st and 2nd of August.
What’s normal in schools today?

Shane Skillen

Technology in the home has become normalised and young people today revel in it. However, there can be a disconnect in schools as students using technology are deprived of the autonomy, personalisation and familiarity of their own devices. Our young learners often hold the link to life-wide learning in their bags, along with half their body weight in mostly redundant print material. What can schools do to harness it?

What computing ‘model’ do you use at home? If you cannot answer that question without thinking, you are not alone; most of us just use what works for our situation. Increasingly, our homes have an abundance of technology: desktop computers, laptops, tablets, phones, phablets, smart TVs, media players and home automation from a myriad of manufacturers most of which, nobody had heard of two decades ago. Technology in the home has become normalised; it is just there, a broad sweep of the arm across the kitchen bench in many family homes would result in a pile of such devices. This tech-saturated environment leads many parents to believe that their children are tech-whiz-kids who traverse this digital world with systematic curiosity, wielding their prodigious skills with subconscious ease. A key consideration for schools is that they are not like homes and the transition from home to school has always had its differences. Children usually do not perceive their technology wizardry and rarely align their ability to apply those skills to a life-wide learning attribute. However, the kitchen bench and the classroom may be closer aligned than they first appear.

Recent advancements in consumer technology – all those devices on your kitchen bench – has highlighted a key issue regarding technology provision in schools. The struggle to keep pace with rapid change means that as soon as a system is chosen, installed, trained for and curriculum is adapted, it is obsolete. The pressure to be responsive to technological change means that a technology model never has an opportunity to mature, is susceptible to faults and is, inevitably, unsustainable. For some time, in the context of technology, the conditions have been conducive for evolutionary change.

Professor Roger McHaney, an expert on business use of technology, discusses in his book *The New Digital Shoreline* that education is at a ‘tipping point’ (McHaney, 2011), a viewpoint also espoused by Microsoft founder, Bill Gates earlier this month in his keynote address for the South by Southwest conference in Austin, Texas (Chenda, 2013). Using a technology adoption metaphor, McHaney cites Gladwell’s book, *The Tipping Point*, stating that for a technology to gain traction in education it needs three critical roles to be fulfilled: mavens, connectors and advocates (Gladwell, 2001). Long before the term BYOD (bring your own device) was being touted in educational circles, a shift was beginning to occur in our student populations. The advent of mobile internet, affordable software and increasing portability of devices means many students are in a position to bring their own technology to school. Enterprising teachers would welcome these devices into their rooms and would facilitate their use into classwork. These are a school’s unwitting mavens. They were the ones attuned to change and other ways of working and with the hindsight and privilege of Web 2.0 and cloud technologies they have no allegiance to or perceived reliance of an institutional computing network. Despite government spawned technology initiatives, which resulted in improved school resourcing, middle school learners, who are often quite adept at using their own devices at home, struggle to demonstrate the same proficiency within school network restrictions. This creates abstractions from what they know, diminishes confidence in the learning environment and undermines the lesson objectives. In many instances the same lesson would be more successful with the introduction of a BYOD network and would optimise the students’ learning at school.

Young people today have a unique attachment with their mobile technology. For many, it is seen as an extension of themselves and an important communication tool; there is a certain level of comfort in that for them. They know what to expect when they turn the device on, they know what programs or apps they have installed and how to use them. It is the same device they use at home, which fosters an important link between formal and informal learning. Even as adults we can acknowledge; the information age has permitted a significant sense of autonomy when it comes to knowledge acquisition. Our schools can embrace the normalisation of technology, by embedding the presence of these devices into our classrooms supported by the structure and rigor of curriculum.

The advent of more student brought devices prevailing in classes permits a greater range of engagement in student learning. As...
of technology, from the library to the lunch table. Increasingly, the vast majority of devices being brought to school have the ability to be turned on instantly and a battery life that lasts longer than the traditional school day. Whether this is a slate type device like the Windows Surface (ThinkPad, iPad etc.), phone, or a laptop/tablet like device with solid state hard drives these provide an imminent, permanently-on environment for learning, irrespective of where they are. Unfortunately for a variety of reasons, these devices rarely see the light of day in middle school classrooms.

What makes portable devices so powerful are applications. Whether they are made or supported by Google, Microsoft, Apple or any other, apps offer a plethora of free or inexpensive learning tools that promote judicious engagement and assists students to map, reference, graph, record, film, edit, compare, read, take and organise notes, and, perhaps most importantly to them, collaborate. Apps essentially transform these devices into ‘universal and ubiquitous information, education, and entertainment portals’ (Anderson, 2009) and go a long way towards developing our students’ ability to integrate technology in a meaningful way, improve digital literacy and foster positive digital citizenship. It is the modern equivalent of holding their pencil correctly, and will help the students explicitly in the long term.

Schools will always cater for specialist learning areas; however, the strength of BYOD is the normalisation of a technological workflow in all learning environments. In core learning areas BYOD by its very nature will impact learning and assessment items. A class doing a video task will no longer be restricted to a particular piece of prescribed or provided software. Mandating software for a task raises an equity issue, which inherently forces class time to become solely allocated to project work as many students will not have access to the same software at home. Furthermore it necessitates that the teacher also has significant proficiency in the software. However, in a BYOD environment the focus is on the product and this allows the students to appositely choose the software that they have at their disposal and are familiar with to complete the task; thereby freeing up classroom time to focus on content and knowledge development. It also builds autonomy by allowing students the flexibility to practice creativity and develop their own learning strategies.

The government’s Digital Education Revolution saw the advent of many schools adopting 1:1 laptop programmes; a model that is already being relegated to the history books as antiquated and restrictive. Curriculum technology planning should aim to be device agnostic or the right device for the right task; this will evolve organically by the natural evolution of technology. Our communities are the advocates of change needed to complete Gladwell’s three predictors of a tipping point. Parents, friends, teachers and students all have a crucial role in how ‘learning must evolve’ (McHaney, 2011). The environment is ready for students to use these devices in classrooms and make schools a richer learning environment; then when they take them back home and use them at the kitchen bench they will be a step closer to being life-wide learners.

**References**


Quest for design success  

Emma Jones

Abstract
How can you effectively and efficiently bring together over 500 Year 8 students from two schools for a collaborative, technology-based activity that spans two days and two campuses? Brisbane Girls Grammar School and Brisbane Grammar School unite in The Quest in August each year. The Quest is an established learning activity, developed by experienced teaching staff, that engages students from the two single-gender schools in peer-level problem-solving design tasks.

Introduction
Using their technological and communication skills to solve open-ended complex problems, cross-school teams of seven students design, produce and present a new product. Each team is overseen by an elected student Project Manager.

History of The Quest
The Quest activity was originally designed so that individual group members were faced with the challenge of reconciling conflicting viewpoints. Students were asked to analyse, negotiate, speculate and evaluate in an environment where they could observe different learning styles in action and benefit from the expertise of students who perhaps worked quite differently.

A key focus of The Quest has always been to nurture communication and conflict resolution skills in a team environment, while immersing students in a problem-solving activity. Over time, various contexts and design situations have been used and it was anticipated that the brief would expand upon a new set of digital and design capabilities. It was expected that each group would use and integrate various Microsoft and Adobe software packages as they developed their logo and packaging designs.

The brief
Java Jake’s, a new company marketing only fair-trade coffee, has just been established. They require an innovative advertising campaign that will convince the Australian public that they should drink their new line of fair-trade coffee named FairBeans, even though it may be a little more expensive than other brands on the market. The effective marketing of coffee and its products is a valuable trade, especially as Australians are a nation of coffee drinkers.

Java Jake’s feel confident that by delving into the treasure chest of young minds not yet exposed to coffee advertising, they will be able to produce original and convincing ideas to encourage consumers to buy their product.

Organisation of the activity

<table>
<thead>
<tr>
<th>DAY</th>
<th>Time</th>
<th>Program component</th>
<th>Description</th>
<th>Resources required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>13.30-13.45</td>
<td>Move into groups</td>
<td>Mixed gender groups of 7 (or 8 if necessary) spread evenly between the available rooms.</td>
<td>4 rooms per school, each room capable of holding between 56 and 64 students. Each room with 32 computers (1 computer between 2 students).</td>
</tr>
<tr>
<td>Phase 2</td>
<td>13.45-14.00</td>
<td>Name badges and introductions within groups</td>
<td>Students generate a name badge for themselves to wear through the activities. They will have time to introduce themselves to one another within their groups.</td>
<td>Sticky labels (one sheet of 8 per group) and coloured pens.</td>
</tr>
<tr>
<td>Phase 3</td>
<td>14.00-14.45</td>
<td>Icebreaker activities</td>
<td>A series of four timed challenges involving visual and spatial awareness and the element of teamwork.</td>
<td>Card match game cards, 1 set per group.</td>
</tr>
<tr>
<td>Phase 4</td>
<td>14.45-15.00</td>
<td>Tidy up</td>
<td>Tissue areas are tidy and resources collected and returned to box in packets. Assisting teachers can be asked to collect after each activity.</td>
<td>2 large bin liners for each of the rooms. Plastic boxes to house resources.</td>
</tr>
<tr>
<td>Phase 5</td>
<td>14:50</td>
<td>Introductory Design Videos</td>
<td>Visual and Q &amp; A</td>
<td>Students create a name for their group and write this on the sheet on their table.</td>
</tr>
<tr>
<td>Phase 6</td>
<td>14:55</td>
<td>Role allocation</td>
<td>Specific introductory tasks (in booklet)</td>
<td>Cube fit together game sheet, plastic coloured cubes and answer sheet.</td>
</tr>
<tr>
<td>Phase 7</td>
<td>15:00</td>
<td>HAND BOOKLETS OUT</td>
<td></td>
<td>X challenge mat and pieces.</td>
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</table>

15.00 RETURN TO RESPECTIVE SCHOOLS

Supervising teachers to guide back
Focus on Schools

The format

Students created a corporate identity for a new range of fair-trade coffee being launched onto the market, including a new logo design, coffee bean packaging and a presentation of the new brand.

The 500 Year 8 students were split into eight smaller groups, four mixed-gender groups in each of the two campuses. Students worked on the activity in large teaching spaces with tables arranged into further smaller group formations.

Each group of seven students took on the roles of:

- Logo Designers
- Packaging Designers
- Presentation Designers and Delivery Managers
- Project Manager

Two students carried out each role, with an individual Project Manager in each team. The designer role, with an individual T

• Project Manager
• Presentation Designers and
• Packaging Designers
• Logo Designers

Each group of seven students took on the role of:

The role of the facilitator-leader

In each room there was a facilitator leading the activity and supervising the physical, logistical and technical aspects of the learning environment, ensuring that the groups were all working effectively. The lead facilitator liaised with the new incoming duty staff as the day’s lessons progressed, advising on the progress of the activity. Supervising teachers helped manage the grading and selection of stage winners.

The learning journey

The teams encountered many constructive challenges throughout The Quest journey. As students took on the challenge of their team roles, perspectives and personalities, their social and emotional skills were developed. In addition to working on their individual aspects of the project, students also needed to be aware of what other members of the team created in order to maintain consistency and work collaboratively. Working to tight deadlines and maintaining a ‘big picture’ style of discussion is often called problem-solving.

The students were expected to work collaboratively to resolve each element within the activity. The students sharing roles within the group needed to redefine problems in their own terms without either dominating the discussions. This style of discussion is often called ‘win-win’ (Petersen & Skiba, 2001) as both parties benefit from the collaboration.

The students were encouraged to follow six steps of a collaborative problem-solving model (Willihnganz, 2001):

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<td>Define</td>
<td>Define the problem in terms of needs</td>
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<tr>
<td>Brainstorm</td>
<td>Brainstorm solutions to the problem</td>
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<tr>
<td>Select</td>
<td>Select the solution that will best meet the needs and check possible consequences</td>
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<tr>
<td>Plan</td>
<td>Organisational planning of the group members</td>
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<tr>
<td>Implement</td>
<td>Implementation of the plan</td>
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<tr>
<td>Evaluate</td>
<td>Evaluate the problem-solving process and how functional the solution is</td>
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Reflection

Throughout the two-day activity, the boys and girls presented a wide repertoire of multiple intelligences (Gardner, 1983, 1993) as they collectively resolved the challenges of The Quest.

The students used higher order thinking skills to collaborate and discuss their ideas and engage their emotional intelligence (Boyatzis, 2007). The experience encouraged students to be confident within the group and experiment with new technologies, while drawing upon skills sets of other group members. Each individual needed to be confident at managing their own workflow within the team’s larger task and become competent in resolving conflict in order to facilitate a cohesive team.

Each Project Manager presented their team’s work to the other teams in the room at the end of Day Two. Presentations were judged by a teacher panel. In each of the rooms across the two schools, the overall winner was determined by the scores accrued throughout the event and a summative score from the panel for the final pitch. The victors in each room were particularly effective at team management and conflict resolution. The ‘winning’ team in each room had clearly worked the most cohesively.

Collaborating through The Quest offers Brisbane Girls Grammar School and Brisbane Grammar School Year 8 students a unique opportunity to employ cognitive, creative and interpersonal skills, providing for the educational, developmental and social needs of our young adolescents during their time as middle years students.

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References


Harrow and UCL Academy find a curriculum solution for middle years

Anne Keeling

Making a difference to learning at the UCL Academy

For the UCL Academy in London, having adopted this curriculum, the move to adopt this curriculum saw almost immediate impact as Assistant Principal, Tom Bowen explains. ‘We were amazed at the engagement and the work produced. It’s so exciting. The children get it immediately.’

For students, the IMYC is a rigorous curriculum that helps them to make links across all of their subject learning by connecting to a conceptual theme (a “big idea”) for a period of six weeks per unit. Throughout each unit, students continue all of their discrete subject learning and, at the same time, explore how their subject learning relates to the big idea of the unit. As the students progress through the unit, journaling and discussion help them to develop their understanding of the big idea, identifying what it means to them from a personal perspective (drawing on their own experiences and interests), as well as from a real world, global perspective.

Every IMYC unit works towards a media project exit point, which asks students to synthesise their understanding of the big idea into a creative media project presentation.

Taking a forward-thinking approach to learning

Tom Bowen explains how this approach to learning is supporting the middle year students at the UCL Academy, ‘We’re an academy that wants to make a difference. We’ve had the chance to take a whole new and forward-thinking approach to the learning and to the way our students are making meaning of their learning. We’re focused on developing the whole student and the IMYC curriculum supports that extremely well. There are no isolated learning sessions; by using the IMYC, all the learning is connected. Our aim is to create the best learning environment to achieve an actively involved and motivated student, providing opportunities to learn both collaboratively and independently.’

This approach to learning has come about from collaboration with the Institute of Cognitive Neuroscience at University College London (the academy’s sponsor). Alongside learning with the IMYC, it also involves students working in SuperStudios (open learning areas enabling group learning), and in learning sets (a group of six who stay together within each learning session). ‘Everything is evolving together very well,’ says Tom. ‘Having the IMYC big idea as a theme across all curriculum areas has proved to be very successful,’ he adds. ‘It’s a benchmark to support students in developing their understanding within all their learning. The students can identify connections in their learning in ways that we teachers do not always see and they are understanding exactly how to use the big idea to help them find relevant links. We had not anticipated the students’ ability to make the links so effectively and what’s most interesting is that it’s a very personal thing for each student; they can find connections in very different ways.’

Responding to the teenage brain

Teachers, parents and scientists alike across all cultures recognise that adolescence is a difficult time and that teenagers really struggle in many ways with the traditional approaches to learning. One researcher whose work influenced the IMYC, Harry Chugani, a neurologist at Wayne State University in Detroit encapsulates this experience perfectly. ‘Adolescence is a time when brains are absorbing a huge amount, but also undergoing so many alterations that many things can go wrong. The teenage years rival the terrible twos as a time of general brain discombobulation.’

During this time, teenagers find themselves struggling to deal with their developing brain, which often results in poor executive function, a need for independence, a desire to find meaning and purpose in what they do, an increase in peer acceptance, and the impulse to take risks and seek pleasure. The IMYC was designed around these very specific developmental needs. As a result, it provides an enriching, positive and supportive learning experience for young adolescent students says Tom Bowen. ‘The learning process of the IMYC (which responds to a teenager’s need for low stress/high challenge learning) is central to how we’ve developed our planning, our teaching and how we’re utilising our space,’ he explains. ‘An entry point at the beginning of each unit is the “hook” to help the students make sense of the big idea and to engage them. A knowledge harvest helps us to identify what the students already know and what they need and want to know which informs our planning. Research and recording tasks for many different subjects create opportunities for a wide range of connected investigation and exploration, and the tasks encourage teachers to facilitate the learning rather than take a didactic approach. Through journaling and blogging, students reflect on the big idea and what it means to them (drawing on their subject learning but then taking it to a personal perspective). Once they’ve done all their subject learning for the unit, the concept is then crystallised and distilled into something personal (through a media project exit point), enabling the students to show their understanding of what the big idea means to them personally.’

The impact this is having at the UCL Academy is significant, says Tom. ‘The joy of the IMYC is that it can produce a very individualised learning response to a challenge that’s set. It fits very well with our vision; where learners learn to think for themselves as wholly educated human beings. It’s a research-led, engaging curriculum helping us to have ultimately happy, motivated, engaged students preparing them well for their next stage of learning and enabling us to make links with...”
the international community.’ These links with the international community come about through IMYC member schools. There are IMYC member schools in 26 countries around the world, including Thailand where IMYC learning is happening at Harrow International School in Bangkok. This has a huge impact; not only on students who chat through Skype to share learning, but also on teachers who share resources and best practice.

Learning with the IMYC at Harrow International

Executive Headmaster and Chief Operations Officer of Harrow International Schools, Mark Hensman says that the IMYC is a curriculum that is directly addressing the learning requirements of Harrow International’s young teenagers. ‘We all know that learning for students needs to be more relevant and inquiry based. We also know that this applies in particular to the Key Stage 3 curriculum. The recent emergence of the International Middle Years Curriculum has therefore been a breath of fresh air and a relief for those who have been looking for a middle years curriculum which builds on the National Curriculum but takes it much further. For us in the Harrow International Schools, the International Middle Years Curriculum has been a great launching pad into ‘big ideas’ while remaining grounded in the National Curriculum.’

For Harrow teacher, Charlotte Flook, the IMYC is enabling her to connect and communicate with teachers from different subject departments like never before. ‘It’s great to see the changes that are happening which are improving on student learning. The departments are now all thinking about learning from the children’s perspectives. In the past we had not really connected our subject learning. Now, with the IMYC, we connect all the learning. We can also tailor the learning so that it is culturally relevant to all our children.’

Charlotte says the changes that have been introduced with the International Middle Years Curriculum are impacting pedagogy. ‘We are already feeling the positive results of the IMYC in the classroom. As teachers, we’re spending less time standing at the front talking to everyone. Now, because of the collaborative, inquiry based approach to the learning, we’re going round to small groups tailoring the learning to the students’ needs. Everyone is benefiting from the student-led approach to learning. It is helping the children to take responsibility for their learning. It took a bit of time for them to get used to this way of learning, rather than simply being told by the teacher. But they’ve really taken this responsibility on well and as they see how much learning their friends and classmates are doing, this encourages them to stretch their own learning more. It’s really positive, collaborative learning and all the students are enjoying and gaining from it.’

The IMYC is now being used by schools in 26 different countries including Qatar, Indonesia, Costa Rica, Kenya, the Netherlands and the USA. More information about the IMYC is available at www.greatlearning.com/imyc.

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Challenging year 9 to take flight

Mr Brett Trollope

The middle years are a crucial time of a student’s schooling life. The experiences gained at this time can have a major influence on their overall approach to learning in the future, both in the senior years and beyond.

In 2013 Tintern Schools have introduced a new program designed specifically to meet the needs of our Year 9 boys and girls. The program, titled ‘Year 9 Challenge’, provides the students with an array of essential life skills and helps them to develop in a physical, social, emotional and intellectual manner, while providing a strong springboard into the Senior College.

The program sits within the regular timetable for Year 9, being allocated an 80 minute period per fortnight. It has flexibility to be adapted to the needs of our particular cohort and is managed by the team of Year 9 form teachers and Year Level Coordinator.

The personal development of our students is a major focus of the program with study skills, basic first aid, personal safety, financial literacy, health and wellbeing, and life skills, all areas that are covered. Our students discover their preferred learning styles via a variety of inventories at the beginning of the year and are educated as to the best ways to approach their learning based on this information. This information is also shared with teachers and parents of the students.

Personal safety is an important part of the program, with the issues of alcohol, drugs and violence covered comprehensively. Programs are run by both school staff and external providers. As part of the health and wellbeing unit, our students are introduced to yoga and the benefits this can have on both their physical and emotional states, especially in regard to stress management.

Understanding financial literacy is a crucial skill for all adolescents with many of our students nearing looking for part-time work, if they are not working already. The students investigate the process of writing a curriculum vitae, applying for a job, and saving money. They become aware of the issues around spending money, including the danger of credit cards and mobile phones.

‘Life Skills’ is a component that provides the students with the opportunity to successfully complete a ‘passport’ of different skills. They are tested on ironing, sewing, cooking, setting tables, general etiquette, washing of clothes, basic car maintenance, changing car tyres, maintaining lawn mowers and many other life skills. This particular unit has been developed in conjunction with the parents of our students and includes a list of skills they desire their children to develop.

There is a strong connection with the outdoors through a progressive three-part camp program, beginning with a two or three day bushwalk to Wilsons Promontory or the Cathedral Ranges. This camp is an opportunity for students to develop their skills and confidence in the outdoors, while also developing a strong sense of self-sufficiency and positive interaction with their peers. The second camp is a five day ‘Winter Activities Camp’ (held at Camp Howqua), where students are challenged by a variety of winter activities including white water rafting and cross-country skiing. The final camp at the end of the year is an option-based, week long adventure. The students choose from a variety of options: a sea kayaking voyage in the Gippsland Lakes, rock climbing and hiking in Tasmania, white water rafting and mountain biking in our high country being some of the options available to our students.

In term 1 we hold a three day ‘City Experience’ where students challenge their assumptions about the city they live in. They work collaboratively in small groups to develop a focus question about a particular issue in Melbourne and are encouraged to choose a topic that is of interest to them and their group, and to report back on their findings to their peers and the school community. The initial research is done at school, before the students set off to investigate their issue in the City of Melbourne. Examples of topics some groups have investigated are:

- Can Melbourne really lay claim to being a multicultural city?
- Is Melbourne providing for a wide variety of sporting interests?
- Is Melbourne a safe city?

The aim of City Experience is to deepen students’ understanding of their community, familiarise students with Melbourne, its landmarks and transport network, while allowing students to undertake research on a particular issue that is of interest to them.

A connection to the local community is an important factor for adolescents and our program has been developed in conjunction with members of our local police force and community groups. It gives students the opportunity to provide services to the local community, while appreciating and accepting the culturally diverse environment in which our school is situated.

The Year 9 Challenge aims to raise the bar for our Middle School Leaders as they are challenged to ask questions for themselves. These questions challenge them intellectually, physically and spiritually and incorporate a strong emphasis on collaboration, reflection and inquiry based learning.

The school values, which are represented in the metaphor of a compass, are clear guiding principles in this program: commitment, integrity, independence, compassion, fulfilment, respect, confidence, responsibility. We believe that this program helps our students leave our Middle School with a clear sense of direction as they embark on the next stage of their journey into our Senior College.

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Churche Middle School prominent old boys project

David Bell

‘Children today are tyrants. They contradict their parents, gobble their food, and tyrannize their teachers.’ Socrates 450 B.C.

Some might say not much has changed. Is there a way for the wisdom of the ages to filter back through to students so that it may be ingested and considered and ultimately acted upon? Do successful men ever get the chance to reflect on their lives and distill this into a succinct kernel of advice to pass on to middle school aged boys? The simple answer is ‘yes’.

A valuable student-driven project outside the auspices of the standard curriculum at Churche has been the Prominent Old Boys Project undertaken by the Churche Middle School Leaders (MSLs)

Each semester, which aims to connect some successful men with our middle years boys.

The project grew from MSL survey feedback in 2010 where it was indicated by the MSLs that they would like to have the opportunity to follow through on small group projects as a way of demonstrating and developing their leadership experience. As a 100-year old school, Churche has a wide range of successful Old Boys across all spheres of endeavour. The project is simple. MSLs chose an Old Boy to make contact with and are responsible for following through under their own steam. This is more difficult than it sounds, with their contacts often having very busy international programs. Once contact is made, the Old Boy is asked to provide his advice to a Churche Middle School boy who has been identified as having similar interests and even characteristics to the Old Boy. He is asked to consider what he learned over the course of his time at school and/or in his field that he wished he had been told while in school.

Invariably the Old Boys are humbled to be told about their selection in the project and are often stumped to consider the way they can best choose their message for posterity. We have evolved past generic exhortations of, ‘Try your best,’ although, ‘Give it everything you’ve got and never give up,’ seems to hold particular gravity for a former Colonel of the SAS Regiment. My favourite one, and the one I felt had most relevance for a former Colonel of the SAS Regiment, was from surgeon and two-time Olympian, Dr Tony Blue, who advised, ‘In any new endeavour, be slow to choose your friends’.

MSLs pass on the quote and a photo of the Old Boy to be mounted and framed for presentation to the Head of Middle School at the end of the semester. The framed pictures are displayed for a semester in the foyer of the Middle School administration office and the pictures they replaced are hung in the stairwells of the Middle School where they can be seen daily by all Middle School boys.

To date, the MSLs average four pictures a semester and the stairwells currently have 17 Old Boys displayed. Inadvertently, this area has become a preferred stop on the Registrar’s tours of the school for prospective parents and boys. The personalizes on the walls range from Wallabies Captain, David Pocock; author, Nick Earls; Queensland Chief Justice, Paul de Jersey; SAS Commanding Officer, Major General Mike Handmathe: Australian Ballet principal dancer, Garth Welch and QANTAS Chairman, Leigh Clifford.

The MSLs are guided to make strategic choices about the Old Boys they contact with a view to representing the full breadth of endeavour, so as never to marginalise any boy. The idea is that no matter the field of interest for a student, we hope to have a successful Old Boy on the wall as an example he can look up to. It is envisioned that the project will be continued from year to year and eventually fill the stairwells of the entire Middle School precinct, inspiring students for the next hundred years.

It is interesting to consider what the MSLs themselves felt that they gained from the task.

Alex felt, ‘In researching my chosen person and finding both the picture and the quote, I learned how hard a leader has to work, even in a task that appears to be simple. This was a very valuable experience and one that I would recommend to other boys who aspire to a leadership position’.

Lachie said, ‘It helped me develop as a leader because I had to examine a number of people who had been leaders in their respective fields. From my research about them, I picked up on their qualities and attitudes towards everyday life.’

Finally, Rory reflected, ‘I felt that I gained a more developed sense of what the ultimate endeavour of this school is; to create fine young men by reflecting on the achievements these men had made.’

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Middle Years teachers’ international exchange: experiences and tips

Andrea Kerr, Greg Sikich & Tim Smith

Introduction

Three teachers from Mt Alvernia College (Queensland) were provided with the opportunity to participate in an exchange program with teachers from Rotorua Intermediate School in New Zealand as part of a professional learning opportunity. For further background information, view the AITSL Illustration of Practice created by MYS. http://www.teacherstandards.aitsl.edu.au/Illustrations/Details/IOP00204

When considering how best to plan for an innovative middle years' curriculum, teachers from Mount Alvernia College in Queensland, Australia and Rotorua Intermediate School in New Zealand were invited to participate in an exchange. The purpose of the exchange was to allow colleagues to observe each other’s context and then reflect critically on their own context. The professional learning from such a program was found to be significant and permitted colleagues to take the time to consider the best ways to reinvigorate their practice.

This article outlines the process undertaken to set up an exchange for teachers from Mount Alvernia College, with teachers from the Rotorua Intermediate School and makes some suggestions about the benefits of the program. It also suggests ways that colleagues could set up and meaningfully participate in a similar exchange, be it with a local school or across international borders.

As professionals we are charged with the responsibility of regularly reflecting on our knowledge, our practice and our engagement with other professionals. Finding ways to do so can be time-consuming, so when we were invited to apply to participate in an international exchange, the benefit of shared experiences, international travel and new perspectives appealed to us.

Student engagement and learning are the key foci in education and assisting teachers to meet the needs of those learners is essential. If teachers are not supported in their professional learning, then they may not be fully equipped to facilitate the ongoing growth of their students. After several years in the classroom, teachers can begin to lose sight of what is happening outside their own classroom and therefore, may lack inspiration, new initiatives and a future focus. Teachers may leave the profession in favour of better pay, fast tracked promotions or improved status. However, if teachers can be supported and funded by their school to undertake professional learning in the form of a teacher exchange program, then this could certainly ‘refuel the tank’ and inspire those teachers to become more engaged in their own learning, which should ultimately benefit the students in their classes.

Our exchange program had a very specific middle years’ emphasis. We were all involved in teaching and planning the middle years’ curriculum in Queensland and our partners were middle years teachers in New Zealand. Our school is a Franciscan Catholic girls’ secondary college, while the school in New Zealand is a State intermediate school.

The process of becoming one of the exchange teachers involved a number of stages.

The initial stage of the process was to write an application as an expression of interest.

The application was a key aspect of the process because individual’s learning goals were defined. These could then become the target areas for learning during the days in (each) school when the exchange took place. Applications were shared amongst all selected participants so we could explore each other’s professional interests.

With any exchange there is an element of ‘give and take’. Our colleagues from New Zealand visited us in Australia first, meaning we had to plan and organise two days of activities for them at Mount Alvernia College. The individual learning goals influenced the planning of these days ensuring that relevant and meaningful experiences and information sessions were provided. In turn, we provided specific learning objectives so that we each had a focus when arriving in New Zealand.

Our exchange partners Billie, Kim, Anne and Stephanie from Rotorua Intermediate School visited Mount Alvernia College for two full days. They met with our Leadership Team and Middle Years Managers around the board room table to discuss our college values, ICT components, network access and the implementation of the Australian Curriculum. After a tour of the school with its mix of modern and traditional brick buildings amongst Italian inspired outdoor spaces, they observed a variety of classes and saw the girls engaging with their teachers and their new iPads. Mount Alvernia College is well resourced: in 2012, when the exchange took place, each student in Years 9 to 12 had personal devices, while Year 8s had the use of laptops in classrooms. The middle school classrooms have varying learning spaces and movable learning pods to facilitate group learning and discussion. There is a strong emphasis on student engagement and cross-curricular linking of knowledge. Students remain in a learning group for the two years of middle school, with the idea that they can foster better relationships and benefit from a more supportive classroom environment.

Information sessions occurred, around our iCentre, e-learning, pastoral issues and structures, and getting to know the students; a great deal of professional learning and many conversations occurred during the two days. A social occasion was also incorporated, which further enhanced the connections made.

Later in the year we visited Rotorua for two days to witness the different demographic, cultural values, leadership structure and classroom practices. Our first insight into the school was at the local airport, where we were greeted by Year 7 students performing a traditional Maori dance. This set the scene for what was to become a fantastic and warm cultural experience. The Maori values are clearly embedded in the walls of the Rotorua Intermediate School and also in the curricula. There is an obvious feeling among students that this is their school and a place where students can be proud of culture, family and peers. A very strong middle years/intermediate ethos is apparent at Rotorua Intermediate School.

There is also a strong Maori representation and a diverse mix of all cultures, as could be seen in the flags displayed in the school foyer.
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Our two days also took us across town to the Western Heights High School where 8 students from the intermediate school were getting a taste of the high school electives – a great example of transitioning. (The sheer size of the school was an eye opener for us.)

As information delivered in a short space of time is often hard to absorb, we collected work samples, documents and educational guidelines to review and discuss later. Both sides of the exchange were asked to give a short presentation to the whole staff body and gifts were given to mark the exchange.

Of course, there has to be a certain degree of flexibility in such a process, and we were able to review our learning goals while on the exchange and reorientate our learning.

We found that no matter how trivial the question, our hosts enthusiastically shared their experiences of how they approached teaching and learning in their context. There was never a question about respect of the others’ experiences.

Perhaps the most unexpected but useful aspect of the exchange was the conversation and inspiration that we drew from each other. The discussions were sparked between us as fellow professionals, and the collaboration and ideas generated during the exchange will be invaluable tools in our own teaching environment.

We found that no matter how much information delivered in a short space of time is often hard to absorb, we collected work samples, documents and educational guidelines to review and discuss later. Both sides of the exchange were asked to give a short presentation to the whole staff body and gifts were given to mark the exchange.

Of course, there has to be a certain degree of flexibility in such a process, and we were able to review our learning goals while on the exchange and reorientate our learning.

There were specific tasks that all participants of this exchange were asked to do as part of the process of learning:

- prepare a comprehensive application that demonstrated a commitment to professional learning for middle years teaching
- suggest personalised learning objectives for the exchange experience
- plan to meet the learning needs of others on the exchange
- reflect and report on the experience, suggesting how the exchange program could be refined and enhanced.

Recommendations

An international exchange can be used to rejuvenate middle years teaching and learning if it is well planned and implemented. Our exchange was successful, and for those considering such an undertaking the following processes and strategies are recommended:

- Application
  - The application process should be planned well in advance and should seek authenticity of interest in the exchange program. Applicants could be asked to write about their current professional learning goals and how an exchange would allow them to meet those goals. Define deadlines for application and have the exchange dates planned by this stage.
- Selection
  - The two schools will need to have established the dates of the exchange and the organisers will need to collaborate on some selection criteria. These criteria may or may not be shared with colleagues. If more applications are received than places available, transparency of selection will more likely build trust than not. For the unsuccessful applicants, other professional learning opportunities could be suggested that better suit their goals.
- Sharing of learning objectives and planning in school experiences
  - It is important that all participants are aware of each other’s learning goals so that ways to facilitate such learning can be planned. An example may be that a colleague has a particular interest in virtual learning environments and a meeting with the e-learning coordinator therefore be appropriate.
- Exchange
  - Decide who will organise travel arrangements and accommodation, how colleagues will travel to your school when they are visiting, if there is to be a social event. Do not forget to plan a presentation for your partner school when you go and taking a gift is a great way to mark the event.

Review of learning

Plan times to meet before, during and just after the exchange to make sure participants can critically reflect on the experiences. Everyone will have a different perspective of what was experienced. It is worth taking the time to discuss these perspectives in detail.

Reporting

Sharing of learning is a vital element of engaging professionally. Decide if participants will write a report or journal article, be invited to speak at a staff meeting, or present at a conference.

It is our belief that participation in and critical reflection on an international teacher exchange could provide significant evidence against the AITSL Standards for Professional Teachers, in particular, at ‘lead teacher standard’ in 3.1, 3.2, 3.3, 6.1, 6.1, 6.3, and 7.4.

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Year 7 – Making the move

Jeni Dunn

In 2015, Year 7 students make their move to secondary schooling in Queensland. How do we, as traditional Year 8 to 12 schools, prepare for these students and what will the ripple effect of this extra grade be to high schools?

St Ursula’s College, Yeppoon, is a girls’ Catholic boarding college presently enrolling students in Years 8 to 12. We began our planning phase for our first Year 7 cohort by organising a consultation meeting with interested parents of our feeder primary schools whose children will be pioneers in this new schooling structure. During this meeting, which was shared with St Brendan’s College, proposals for Year 7 students were discussed and parents were given the opportunity to share their views and concerns about how this historical transition should take place. Most parents were concerned, not so much about the curriculum that would be delivered, but about the logistical details – the Year 7 precinct, the classrooms and playground areas. Our two colleges also have the issue of developing appropriate boarding facilities for not only another grade, but for younger students.

Since that consultation meeting, much informal discussion has taken place about what the curriculum could look like, with the possibility of dividing the entrainment subjects (Dance, Drama, Visual Art, Technology, Food, Textiles, Business and Music) between Years 7 and 8, to allow those middle years students to study less subjects at any time, while still having a significant ‘taste’ of all the subjects that are offered as elective choices in Years 9 and 10. A lot of planning will need to take place to work out the logistics of the timetable and curriculum, particularly for 2015, when we will have both a Year 7 and a Year 8 cohort transitioning.

The environment in which the learning will occur is important for middle years students and particularly for our new Year 7s coming into the school. An architect has worked with our staff to design a proposal for our Year 7 precinct – a redesign and refurbishment of an existing area of the college that would potentially create a distinct indoor and outdoor learning area, provide suitable areas for eating lunch and socialising, as well as provide bathroom and bag facilities. In May a committee from the Queensland Catholic Education Commission will be visiting our college to assess the viability of our proposed refurbishment plan. Once approval has been granted the fine details will be planned and work will begin.

In the future other college programs will need to be assessed to see how they will meet the needs of, not just more students, but also younger ones. Programs, like our Pastoral Care system, which is based on vertical House Groups, and the district interschool sporting competitions, will need to be examined to see how they could best suit the needs of all students. Our college uniform, including the compulsory backpack, may also need to be looked at to see if any changes or redesigning would be appropriate. These and other issues will be permanent agenda items at leadership and teacher meetings at all levels over the next few years.

At the 2013 school year began, it was interesting to hear quite a few of our Year 8 parents commenting that their daughters were well and truly ready for high school last year. Over the years of working with middle school girls I have noticed that the Year 8 students’ physical, social and emotional developmental levels differ vastly at the beginning of Year 8, but by the end of the transition year they have generally adapted to the secondary regime and have figured out where to go, when, with what equipment, and have navigated their way through a variety of subjects, teachers, assessment schedules, timetables and extra-curricular activities.

At St Ursula’s College we work hard to ensure that the needs of middle years students are being met, and the knowledge we have gained in doing so, should stand us in good stead to be able to meet the needs of the younger cohort in 2015. So, although much discussion and thought will need to take place before 2015, I feel very confident that the historical time of the transition of Year 7 students to our college will be smooth and it will be an exciting time for both the students and the middle school teachers.

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Twitters and Blogs and PLNs...

No one would argue against the need for professional development as a means of engaging with the cutting edge nature of teaching in the middle years. Teachers understand the value of professional engagement with the curriculum, the developmentally appropriate pedagogy of adolescence as well as the up-skillling that comes from peer to peer conversations.

The term PLN (Professional or Personal Learning Network) has been seen more and more in educational circles in recent years.

Electronic communication opens the doors to quick (almost instantaneous) and easy communication with like-minded professionals right across the globe. The perspectives and opinions of others challenge and grow us in new ways. We have the opportunity to view meta-educational concepts, filtering what is relevant for us and evaluating the worth of perspectives from our specific setting.

One powerful way of developing a network of like-minded educators is through the medium of Twitter.

Twitter is a social media tool that allows anyone to communicate via messages (Tweets) limited to 140 characters. It is the 140 character limit that makes Twitter such a useful tool. Tweets are short messages or descriptions that may include links to more detailed articles or websites. Twitter has become one of the best places for teachers to collaborate, share solutions to common instructional issues, and discuss education policy and issues.

Conversations and connections are made and friendships formed between educators and learners. A great example is #MSChat (Middle School Chat) hosted at midday Australian EST every Friday. Twitter can also be used as a backchannel to conferences; most conferences or PD have a hashtag, meaning you can engage in conversation and follow PD all over the world.

A teacher who engages with other educators on Twitter essentially has a 24/7 open door policy and help desk. A great example is #edchat; search it and you will see a real-time stream of discussion about an unlimited number of educational topics.

For those educators who wish to share their own perspectives on education in a broader sense – who wish to put their own voice into the educational marketplace – then blogging might be a valuable outlet.

So, what would you write about in a personal blog? That depends on many factors, but the underpinning decision will depend on what you want to achieve with your blog. For many people, they want a forum to enable a creative, thought producing outlet; a place that challenges them to put their beliefs, understanding and views into concise statements. This can prove to be an extremely powerful professional process and one that generates significant self-reflection.

Some want to pose tricky questions and seek answers from professional colleagues, not unlike what happens through the ‘Twitterverse’. Yet another group will be looking to share the day-to-day ideas and classroom procedures they have found to be successful and, in doing so, discover ideas and strategies that work for others. And, of course, some blogs will be a combination of any or all of these, morphing and developing according to the blogger’s learning journey. A blog can ultimately become an educator’s digital portfolio, where professional work and achievements might be documented; a dynamic evidential record. But in all of these scenarios, the value comes from the opportunity to think, consider, present and stretch oneself. And that is a powerful process.

Even if you have no intention of blogging, there are a multitude of opportunities to participate in the topics discussed by others simply by leaving a comment on their posts. Be encouraged. For a minimal time commitment, blog-reading or blog-writing can generate a great deal of potential professional input.

About the authors:

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Continue the conversation with Summer on twitter: @EduSum.

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A huge list of middle years related blogs.
middleschoolmaestros.com

A fun blog with ideas and comments on Middle Years teaching
middleschoolmattersblog.blogspot.com.au

Another ideas blog
middleschoolforlife.blogspot.com.au

Why not begin your blogging journey by perusing the following blogs that have a middle years theme:

David Wilcox’s blog on Middle Years teaching and leadership
davidw.edublogs.org

A View from the Middle, by Summer Howarth
edusum.edublogs.org

An Australian blog, primary school focused with strong inquiry based and pedagogical links
whatadaid.wordpress.com

A New Zealand teacher writing about daily classroom life, digital technology and using social media
traingtheabove.wordpress.com
Remember the Harry Potter craze when every child had their nose deep in the adventures of Hogwarts? Teachers everywhere smiled as the pages turned and little eyes lit up. We all thought the same thing: Gotcha!

For we know that once you discover a good read, you’re hooked for life.

And then came the paranormal/vampire/werewolf/romance craze and we all wished for magic wands from Ollivanders that would ‘swish and flick’ the contents of those books into something less... hormonal.

So when I read Glenn T Ryan’s The Last Dragon Home, I immediately put my students onto it. Here is a book that has action, suspense, political intrigue, high adventure, and the ability to be read to a class without the teacher blushing.

The novel follows the journey of Whitestaff, a dragon who wants to find his own kind. He is aided by a young sorceress, Mollie, who helps him find the portal that can take him home. At first Whitestaff is happy to be with his own kind, but mostly, there is always something happening, so it’s very hard to put down.

It’s also a digital exclusive. This may be a barrier to some, but I can assure you that most students seem to engage with books a lot more if they require a battery to run.

It’s written for those students at middle school age, but, like that boy with the lightening scar, readers of all ages and both sexes will appreciate this narrative.

I enjoyed this book immensely, and, judging by the reviews on the iTunes, I’m not the only one.

The Last Dragon Home: the next reading craze is here.

What I love about this book is that there is never a dull moment. The chapters are short, so reluctant readers can engage with it easily, but mostly, there is always something happening, so it’s very hard to put down.

What I love about this book is that there is never a dull moment. The chapters are short, so reluctant readers can engage with it easily, but mostly, there is always something happening, so it’s very hard to put down.

Information for Contributors

MYSA welcomes submissions for journal inclusion that reflect the aims of the Association and address issues relevant to the middle years of schooling. Possible topics include: the developmental needs and interests of young adolescents; family and community partnerships; varied approaches to teaching and learning integrated curriculum; authentic assessment; school leadership and organisational structures in the middle years; information and communication technologies and resources in the middle years; research findings and future developments in the middle years.

Contributions may take the form of:

- Contributions may take the form of:
  - academic and research papers that make an original contribution of an empirical or theoretical nature
  - literature reviews
  - papers of a practical or applied nature
  - reports
  - viewpoints
  - book reviews

Contributions

- The journal has two levels of acceptance of papers for publication: refereed and non-refereed. Referred papers will have two referees selected from relevant fields of study by the editor. Papers must clearly indicate if they wish to be considered for refereed status. Referred articles will be included in a specific section of the journal.
- Contributions shall be submitted electronically via email to the MYSA email address, or on CD, as a Microsoft Word document. Articles must be double-spaced, without the use of styles, 12 point font Times New Roman. The submitted article and CD become the property of MYSA.
- All contributors need to complete an Author’s agreement form to be submitted with the article.
- Papers should be between 700 and 5000 words in length.
- Each article should have a separate title page that contains the title, the names of all authors, their contact addresses, email addresses, and telephone and facsimile numbers. The names of the authors should not appear on the rest of the paper.
- An abstract of no more than 200 words must accompany each refereed article.
- All references should be placed at the end of text using APA (6th edition). For example:

  Journal article

  Book

  Chapter in edited book

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  Footnotes are not to be used.
  - Figures and diagrams should be professionally prepared and submitted in a form suitable for reproduction, indicating preferred placement.
  - Photographs should be submitted separately (not included within the text). All student photographs, art work, poetry etc must be accompanied by copyright release forms, which are available on the website or from the editor.
  - If the material has been published elsewhere, details must be included on the author’s agreement form.
  - The Middle Years of Schooling Association Inc holds copyright for articles published in the Australian Journal of Middle Schooling, excluding those previously published elsewhere.
  - It is the right of the editor to make minor editorial amendments without consultation.
  - Upon acceptance of contributions for publication, the contributors will be advised of the likely issue and date of publication. A complimentary copy of the journal in which the article appears will be sent to contributors.

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