

Engagement in Australian schools

A paper prepared by the Australian Institute for Teaching and School Leadership

Policy makers and researchers have long focused on trying to combat ‘disengaged’ behaviours, rather than on understanding and promoting engagement among students. This focus only captures part of the issue - engagement is a complex cognitive process, including a student’s psychological investment in their own learning and personal learning strategies.¹ The internal nature of much engagement means that it is difficult to define and measure. As such, it has been hard for researchers and policy makers to determine which solutions can aid engagement and the impact student engagement can have on learning outcomes.

Section 1 addresses the ambiguity in the term ‘engagement’ and provides a multi-levelled definition that covers behavioural, emotional and cognitive engagement in learning. The complexity of the definition is reflected in the measurement difficulties outlined in Section 2. This includes practical strategies to assess engagement. Section 3 discusses how engagement can lead to positive outcomes for students, and Section 4 discusses what could be done to promote engagement. Section 5 looks at what governments currently do in this area. Perhaps unsurprisingly, governments tend to focus on the negative aspects of disengagement instead of the positive aspects of engaged learning. Finally, suggestions for the next steps in research and policy on disengagement are listed in Section 6.

1 What is engagement?

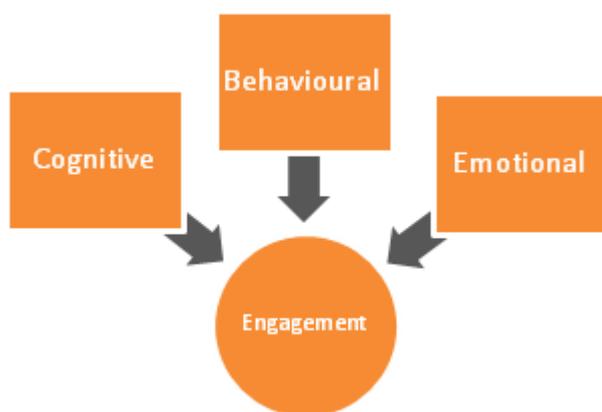
Engagement is an ambiguous term; poorly defined and difficult to measure. Engagement is not simply about good classroom behaviour or attendance, but a connection with learning.² The student who is quietly sitting at the back of the classroom not participating in discussions or completing their work is as disengaged as a child who is talking with friends or the child who did not show up at school.

This ambiguity means engagement is difficult to quantify. This may be why most analyses and attempts to quantify engagement focus on more tangible negative behaviours and learning outcomes.

Fredericks *et al.* (2004) propose a framework for considering engagement that distinguishes between cognitive, behavioural and emotional engagement.

¹ Fredericks, *et al.*
(2004) ² *Ibid.*; Seal
(2009)

Figure 1: Framework for understanding engagement³



Cognitive engagement is not clearly defined, and is therefore difficult to measure. It can be understood as a student's psychological investment in their own learning.⁴ This is the hardest to detect from behaviours alone - it is "not just students doing things but it is something happening inside their heads".⁵ When cognitively engaged, students concentrate, focus on achieving goals, are flexible in their work and cope with failure.⁶ This is different from high performance: a student who is performing well may still be disengaged if they are coasting and not motivated to exert themselves more than is necessary to get by.⁷

Behavioural engagement refers to students' participation in learning and classroom activities.⁸ This includes adhering to behaviour rules, attending lessons as required and arriving at classes on time.⁹ Importantly, behavioural engagement refers to the learning behaviours that are important for high student performance, which may include collaboration and communication with peers.¹⁰ It also covers student participation in other aspects of school life, such as extracurricular activities and school social life.¹¹

Behavioural engagement is helpful for cognitive engagement to occur as it ensures students are physically ready and willing to learn. It is also the aspect of engagement most often measured and reported, largely because it is the easiest to measure: it is easy to tell if a student is in the classroom; it is harder to tell if they are actually working. However, quantitative assessments tend to focus on negative disengaged behaviours rather than positive learning behaviours in the classroom.

Emotional engagement refers to the relationships between students and their teachers, classmates and school.¹² This has also been called 'identification' with school and learning practices.¹³

³ Adapted from Fredericks, *et al.* (2004) and Department of Education and Early Childhood Development (2009)

⁴ Willms (2003); Fredericks and McColskey (2012); School A to Z (2013)

⁵ Department of Education and Training (NSW)

(2006) ⁶ Fredericks, *et al.* (2004)

⁷ Willms (2003); Fredericks, *et al.* (2004)

⁸ Willms (2003); Finn and Zimmer (2012)

⁹ Fredericks and McColskey *ibid.*

¹⁰ Huang Pu District Teacher Training Institute (2011)

¹¹ Department of Education and Early Childhood Development (2013)

¹² Fredericks and McColskey (2012)

¹³ Finn and Zimmer *ibid.*

Students are engaged when they feel included in the school and feel an emotional bond with the school, its teachers and their peers.¹⁴

Not surprisingly, it is difficult to separate these three facets of engagement in a quantitative assessment.

2 Can you measure engagement?

Engagement is difficult to measure. Cognitive engagement refers to the processes which occur within a student's thinking and motivation. It is less visible and so has received less focus in analysis. Instead, the focus on engagement has largely been on behavioural and emotional engagement. These forms of engagement can be expressed in physical indicators, which are more easily observed.

2.1 Measuring behavioural engagement

The Australian, and indeed international, evidence measuring engagement is patchy. Policy tends to focus on the behavioural consequences of disengagement. Early intervention strategies focus on identifying students who are 'at risk' of disengagement. For example, Victoria's DEECD identifies 'at risk' students as those with¹⁵:

- erratic or no attendance at school
- low literacy or numeracy/poor attainment
- lack of interest in school and/or stated intention to leave
- negative interactions with peers
- behavioural issues including aggression, violence, or social withdrawal
- significant change in behaviour, attitude or performance

These are behaviours that are easy to identify. This is in keeping with the majority of the evidence on student engagement. New South Wales uses attainment and retention of students as a measure of engagement.¹⁶ These are not measures of engagement, but of the consequences of disengagement, such as students' retention (Figure 2) and attendance (Figure 3).¹⁷ These measures indicate a sizeable minority of Australian students are disengaged. Average apparent retention rates differ between male and female students, with 73 per cent and 83 per cent respectively.¹⁸ Attendance rates vary state by state, but all trend downwards in secondary schools and, unsurprisingly, after post-compulsory school education. This highlights the emphasis on negative behaviours that may stem from problems with engagement rather than engagement itself. For example, if we measured engagement by attendance, then almost all primary school students would be considered 'engaged' with their learning.

¹⁴ Department of Education and Early Childhood Development (2013)

¹⁵ Ibid.

¹⁶ Office of Communities Commission for Children and Young People (NSW) (2011)

¹⁷ Finn and Zimmer (2012)

¹⁸ Apparent retention measure does not take into account a range of factors such as overseas migration, repeating students, mature-age students, changes in study patterns from full-time to part-time or part-time to full-time and other net changes to the school population. Australian Bureau of Statistics (2012)

Figure 2: Apparent retention rates, Years 7/8 - 12¹⁹

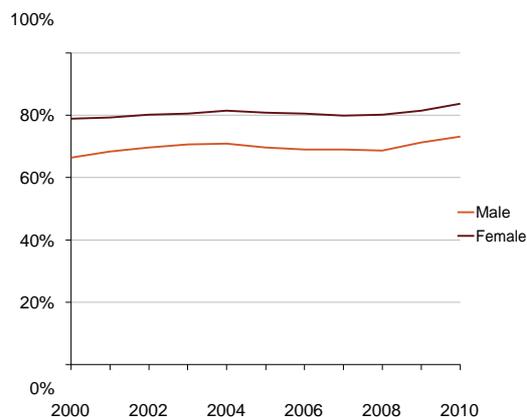
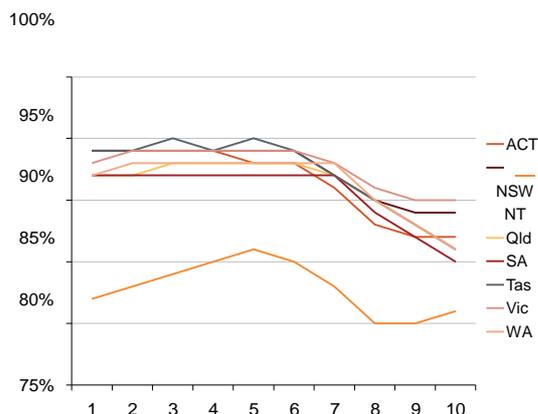


Figure 3: Government school attendance rates by state and year level (2009)²⁰



2.2 Measuring emotional engagement

There have been attempts to develop indicators for less emotional engagement. Student surveys can be used to ask students about their attitude to learning and identification with education and school.²¹ For example, in Queensland, one in four Year 10 students selected an image of a prison to describe their school; with 62 per cent of boys 'not coping' in English doing likewise.²²

An analysis of the 2003 PISA data shows that Australian students had engagement levels not significantly different from the OECD average on measures of participation and belonging (see Figure 4): Australian students score 495 on the index of belonging, and 502 on the index of participation (the OECD average is standardised to 500). The index of belonging is created using students' responses to questions regarding their personal feelings about being part of the school community (emotional engagement). The index of participation uses behavioural engagement measures, focusing on absenteeism.²³ Among OECD countries, about 25 per cent of students were considered to have a low sense of belonging, and 20 per cent were regularly absent from school.²⁴ The OECD does not measure or link cognitive engagement to learning outcomes, a symptom of the difficulty in collecting this kind of evidence.

¹⁹ Ibid.

²⁰ Australian Curriculum Assessment and Reporting Authority (2009)

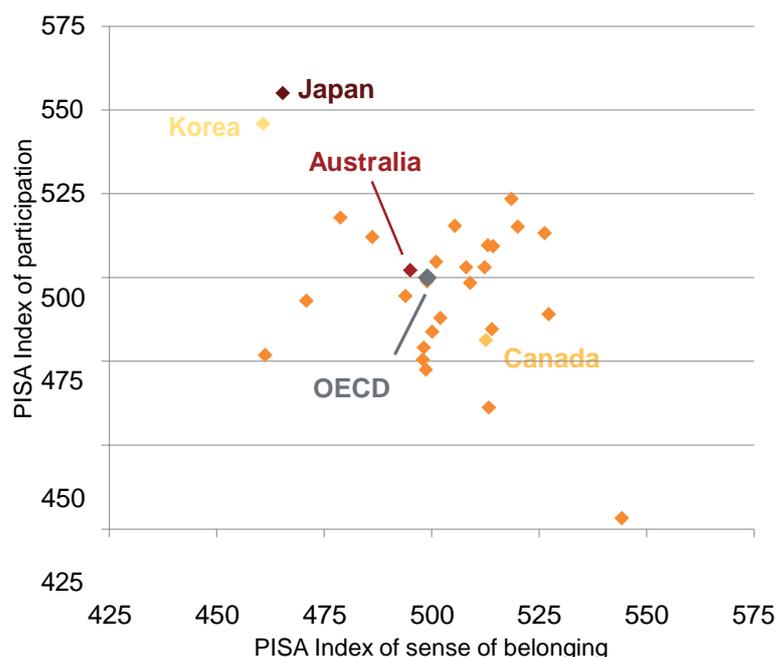
²¹ Fredericks and McColskey (2012)

²² Dusseldorp Skills Forum (2006)

²³ For further explanation see Willms (2003)

²⁴ Ibid.

Figure 4: Engagement in the OECD (2003)²⁵



2.3 Measuring cognitive engagement

There are not currently reliable measures of cognitive engagement in Australian schools. Questions remain about how to design measurement methods that accurately account for a cognitive process.²⁶

Some research has looked at behavioural indicators which might suggest cognitive engagement. These include behaviours which suggest cognitive engagement. Teachers can infer concentration and enthusiasm for a task by observing students' facial expressions and posture, reaction time and verbal utterances. Additionally, they can look at aspects of the students' work such as persistence, precision, and satisfaction.²⁷ The Pipeline Project studied 2000 young people over four years in Western Australia to examine the relationship between behaviour and academic performance.²⁸ Teachers completed a behaviour checklist, including a list of productive and unproductive behaviours. In any year, about 60 per cent of students were considered to behave productively, a figure that varied greatly between schools.²⁹ One in five students was reported to be inattentive.³⁰ This suggests that there are a considerable number of cognitively disengaged students.

In Shanghai, efforts have been taken to identify the learning behaviours that contribute to cognitive engagement. This helps teachers to determine which students need to be engaged, and helps schools and districts to provide the right support to these teachers to

²⁵ Ibid.

²⁶ Fredericks, *et al.* (2004)

²⁷ Warren (2012)

²⁸ Angus, *et al.* (2012)

²⁹ Ibid.

³⁰

Ibid.

help them.³¹ For example, classroom participation is classified into³²:

- Active answering – students voluntarily answer questions
- Passive answering – students answer questions when requested by teachers
- Question raising – students voluntarily ask the teacher questions

These different participation methods indicate that the student has different levels of cognitive engagement with the topic.

2.4 Do teachers identify engagement?

It is not clear that teachers in Australia are skilled in identifying different types of engagement in students. They are often more likely to identify uncooperative and low-level disruptive students as those who are not engaged with learning.³³ But this fails to recognise the large group of students who are ‘quietly’ disengaged.

The data in Australia is not good enough to provide an accurate picture of the extent of engagement. It is possible to see that a considerable number of Australian students exhibit simple behavioural indicators of disengagement, such as absenteeism and school dropout. This should provoke concern about the level of engagement among students, and how it is being supported (if at all). But teachers also must ensure they are focusing on the non---disruptive disengaged. This would be much easier if indicators were developed so teachers have better guidance about identifying engagement among students.

A number of high---performing systems around the world have behavioural change at the heart of their school education strategy.³⁴ Improvement comes from first identifying effective learning behaviours, and then the teaching behaviours that develop the desired learning behaviours. All policies and programs are then aligned to monitor and develop the behavioural change process.

In Shanghai, teachers are observed, and observe other teachers, with the aim of improving teaching and student learning outcomes. However, much of the focus of the observation and feedback is on behavioural change; how to continually improve teaching and learning behaviours. Behaviours that typify engaged learning are emphasised. As a framework for classroom observation, the Huang Pu District Teaching Institute has outlined the learning behaviours it expects to see in teachers and their students. These include³⁵:

- learning outcomes of students
- teachers’ verbal attention to students’ work (encouraging and recognising positive performance; continually asking questions and instructing students)
- teachers’ non---verbal attention to students (eye contact, body language)
- teachers’ individual instruction to students (provides personal instructions to students when they are involved in activities)

³¹ Huang Pu District Teacher Training Institute (2011)

³² Ibid.

³³ Irvin (2006); Tadich, *et al.* (2007); Seal (2009)

³⁴ Jensen, *et al.* (2012)

³⁵ Huang Pu District Teacher Training Institute (2011)

- students' involvement (answering questions, raising questions, engaging in activities)

These are important as they recognise the role that teachers can play in stimulating the engagement of students. Moreover, they recognise student engagement on a number of dimensions: participation in activities (behavioural engagement), asking questions (cognitive) and responding to teachers' feedback (emotional). Ultimately too, these positive learning behaviours recognise the impact that they should have on the learning outcomes of students.

3 What are the consequences of disengagement?

There is limited evidence on the relationship between engagement and learning outcomes, at least partly because of the measurement issues discussed. Intuitively, engagement would be an important aspect of student learning.

Engagement is associated with a number of positive learning and life outcomes. Students who are not engaged with their learning are likely to learn at a slower pace, leading to lower achievement.³⁶ Across the OECD, participation and emotional engagement are moderately related to student performance.³⁷

Emotional engagement includes how students identify with school and the enjoyment they get from learning. Positive associations with school are associated with students continuing with further study, immediately post-school or ongoing throughout adulthood.³⁸ Emotionally engaged students are more likely to complete Year 12: 96 per cent of those who completed Year 12 said they were happy at school, compared to 85 per cent of non-completers.³⁹ However, it must be noted that even this measure is an inexact proxy for emotional engagement, demonstrating the scope for greater research on the link between engagement and outcomes.

4 How to promote engagement?

Levels of student disengagement vary from school to school, not necessarily related to student background.⁴⁰ There are steps that schools and teachers can take to maximise student engagement.

However, there is a striking lack of evidence on the impact of various learning and teaching strategies on engagement. Hence, this section cannot provide step-by-step strategies for schools to implement to promote engagement.

Some studies have shown that engagement is increased through flexible, individualised teaching in a supportive learning environment. Project-based learning, for example, allows students to own their own task. Strong student-teacher relationships create a classroom where students feel safe and engaged. Student monitoring is a key step for teachers to assess whether they are having an impact on students.

³⁶ Fredericks, *et al.* (2004); Hattie (2009)

³⁷ Correlations between PISA indices of belonging and participation and three measures of literacy – $r^2 = 0.48$ ---
0.51; Willms (2003)

³⁸ Bryce and Withers (2003)

³⁹ Foundation for Young Australians (2009)

⁴⁰ Willms (2003)

Project-based learning

Many disengaged students feel that school is not relevant to them.⁴¹ Engaging teaching is personalised and motivating for students.⁴² Within all classrooms, there is scope for teachers to make learning feel more relevant to students. Project-based learning allows students to spend extended time on a topic that interests them while still, if structured correctly, allowing the teacher to support the student with the learning outcomes they require.⁴³ Providing students with the option to choose vocational or TAFE options as part of their school experience can be a means for re-engaging students.⁴⁴

Student-teacher relationships

High levels of student wellbeing are important for a student to identify with their learning environment.⁴⁵ Hattie finds that strong classroom management and student-teacher relationships have a significant impact on engagement and achievement.⁴⁶ This means providing students with a safe environment.⁴⁷ That is, not just one that is physically safe, but also a place where students feel able to make mistakes. Motivation is a fundamental part of engagement that is difficult to encourage where students are cautious about contributing and dispirited when corrected.⁴⁸ Mutual respect drives high expectations.⁴⁹ This leads to self-regulated learning where a student is able to shape her own goals.⁵⁰

The role that engagement plays in learning outcomes is not clear. However, it seems that effective teaching should be engaging teaching.⁵¹ It is not clear if the approach to engaging students is different from providing high quality teaching. A number of the approaches suggested for developing engaging teaching are similar to those proposed for good teaching. Teachers need support for engaging practice, during initial training and beyond, to ensure they are implementing approaches that will work for their students. Professional collaboration, observation of practice, feedback and appraisal can be important ways for teachers to learn from one another about how to engage students.

Practical initial teacher education and experience with disengaged students

New teachers want more preparation working with disengaged students through increased practical training in their initial teacher education.⁵² Many feel that their training experience is overly theoretical, and when this occurs they need extra support translating the theory of their course into practice when they have to work with disengaged students.⁵³ The lack of exposure

⁴¹ Dusseldorp Skills Forum (2006)

⁴² Fullan, *et al.* (2006); Student Learning Division (2010); KPMG (2009); Seal (2009); Hill (2011)

⁴³ Fredericks, *et al.* (2004); Innovation Unit (2012) ⁴⁴ Dusseldorp Skills Forum (2006)

⁴⁵ Warren (2012) ⁴⁶ Hattie (2009)

⁴⁷ Department of Education and Training (NSW) (2006); Department of Education and Early Childhood Development (2009); Seal (2009); Warren (2012); School A to Z (2013)

⁴⁸ Department of Education and Training (NSW) (2006)

⁴⁹ Dusseldorp Skills Forum (2006); Department of Education and Early Childhood Development (2009); Seal (2009)

⁵⁰ Tadich, *et al.* (2007)

⁵¹ Finn and Zimmer (2012); Department of Education and Early Childhood Development (2009)

⁵² Australian Education Union (2009); Seal (2009)

⁵³ Seal (2009)

to disengaged students makes it hard for teachers to identify disengaged learners when they are on their own in the classroom.⁵⁴

Monitoring student engagement

Identification of disengaged learners is the vital first step in ensuring that help is targeted towards these students to re-engage them in the learning process.⁵⁵ Teachers and students can be observed to help identify students demonstrating engaged, and disengaged, learning behaviours.⁵⁶ Monitoring is an important part of the process for teachers to assess their impact and ensure that students are on the path to engagement.⁵⁷

Classroom observation

Engaging teaching needs to be modelled.⁵⁸ Instructional leadership enables teachers to learn effective teaching.⁵⁹ Observation and discussion of colleagues' effective practices enables teachers to access examples of effective practice. Being observed also provides teachers with alternative viewpoints about what was successful in their classroom.

Professional collaboration

Professional collaboration, such as through learning groups, enable teachers to share ideas about what works with students with different levels of engagement.⁶⁰ This could include, for example, the best approaches for integrating engaging technology into classroom practice.⁶¹ Not only can teachers learn new things from these groups, but it forces them to confront their own practice – to adapt and evaluate for continuous improvement.⁶²

Feedback and appraisal

Feedback and appraisal helps teachers to determine if their classroom performance is having an impact on the engagement of their students.⁶³ Almost two thirds of teachers report that the appraisal they receive is largely done to fulfil administrative requirements.⁶⁴

5 What are governments doing to promote engagement?

Governments across Australia recognise the importance of engagement, but few explicitly provide strategies and guidance for boosting engagement in the classroom. Policies on 'at risk' students and behaviour implicitly discuss engagement issues. However, there is much scope for governments in Australia to consider what they mean by engagement and how they can promote it.

DEECD has the most clearly articulated policy on student engagement.⁶⁵ The *Effective Schools are Engaging Schools* guidelines outline DEECD's view about the engaging environment that schools need to provide.

⁵⁴ Ibid.

⁵⁵ Fullan, *et al.* (2006); Griffin (2012)

⁵⁶ Huang Pu District Teacher Training Institute (2011)

⁵⁷ Fullan, *et al.* (2006)

⁵⁸ Department of Education and Training (NSW) (2006) ⁵⁹ Ibid.

⁶⁰ Seal (2009); Griffin (2012); Huang Pu District Teacher Training Institute (2011)

⁶¹ Griffin and Woods (2006)

⁶² Warren (2012); Elmore (2004); Griffin (2012)

⁶³ Jensen and Reichl (2011) ⁶⁴ OECD (2009)

While acknowledging the importance of cognitive engagement, it largely focuses on behavioural interventions schools can take, including creating a positive and safe school environment, encouraging student participation, implementing early intervention approaches and responding to the needs of individual students.⁶⁶

6 Next steps

It is clear that there is a role for AITSL in identifying disengagement and shaping the response to it in Australia.

Clarify how engagement matters for learning

It is important to clarify the scope of the term 'engagement'. Policy discussion has long focused on the negative consequences of disengagement, such as school dropout, and clear behavioural indicators, such as absenteeism and disruptive classroom behaviour. This overlooks the complexity of engagement, especially the cognitive engagement of students who may be otherwise attending class and behaving well.

More work needs to be done to explain the link between engagement and learning outcomes. It is not clear which aspects of engagement matter most for learning outcomes. Such work would point the way towards targeted solution for students.

Identify positive learning behaviours for engagement

AITSL could identify a list of positive learning behaviours that encapsulate effective, engaged learning. Such behaviours can provide a framework for policies and programs that increase engagement through good teaching. Systematic identification of engaged behaviours allows student monitoring. Clearly articulated behaviours support teachers as development goals can be identified.

Develop measures for cognitive engagement

AITSL could develop indicators that measure engagement beyond the inadequate proxy measures that are currently used. Measures such as retention and absenteeism do not measure engagement in a way that can provide useful information for addressing the situation – measuring students who have dropped out of school is of limited use when implementing early intervention strategies.

Cognitive engagement is a key part of a students' ability to learn, and so it is important to develop indicators which identify when students are becoming disengaged in this regard.

Assess the effectiveness of various strategies for promoting engagement

There is very little evidence on what strategies have an impact on engagement. Even less has been done on which are the *best* strategies to implement given limited resources. Once engagement can be identified, it becomes possible to test the effectiveness of various learning and teaching strategies to address the issue. AITSL can help to provide strong evidence for schools and teachers to adopt.

⁶⁵ Department of Education and Early Childhood Development (2009)

⁶⁶ Ibid.

References

- Angus, M., McDonald, T., Ormond, C., Olney, H., Rybarczyk, R., Taylor, A. and Winterton, A. (2012) *The Pipeline Project: Executive summary*, accessed 16 April 2013, from http://www.ecu.edu.au/_data/assets/pdf_file/0015/423240/Pipeline_Project_ExecSummary.pdf
- Australian Bureau of Statistics (2012) *Year Book Australia, 2012*, catalogue number 1301.0, Australian Curriculum Assessment and Reporting Authority (2009) National Report on Schooling in Australia 2009: Additional Statistics, accessed 17 April 2013, from http://www.acara.edu.au/verve/resources/National_Report_on_Schooling_2009_Part_9_Additional_Statistics.pdf
- Australian Education Union (2009) *New Educators Survey 2008 Results and Report*, accessed 17 April 2013, from <http://www.aeufederal.org.au/Publications/2009/Nesurvey08res.pdf>
- Bryce, J. and Withers, G. (2003) *Engaging secondary school students in lifelong learning*, accessed 17 April 2013, from http://research.acer.edu.au/cgi/viewcontent.cgi?article=1014&context=indigenous_education
- Department of Education and Early Childhood Development (2009) *Effective Schools are Engaging Schools: Student Engagement Policy Guidelines*, accessed 17 April 2013, from <http://www.eduweb.vic.gov.au/edulibrary/public/stuman/wellbeing/segpolicy.pdf>
- Department of Education and Early Childhood Development (2013) 'Identifying Students at Risk', accessed 15 April 2013, from <http://www.education.vic.gov.au/school/principals/participation/pages/disengagedrisk.aspx>
- Department of Education and Training (NSW) (2006) *School is for me: Pathways to student engagement*, accessed 16 April 2013, from <http://www.sydneyr.det.nsw.edu.au/Equity/documents/PSP/PSPPage-RESAERCH-SchoolsForMe.pdf>
- Dusseldorp Skills Forum (2006) *What's Mainstream?*, accessed 15 April 2013, from <http://www.dsf.org.au/resources-and-research/184-whats-mainstream-conventional-and-unconventional-learning-in-logan>
- Elmore, R. F. (2004) *School Reform from the Inside Out: Policy, Practice, and Performance*, Harvard Education Press
- Finn, J. D. and Zimmer, K. S. (2012) 'Student Engagement: What Is It? Why Does It Matter?', in *Handbook of research on student engagement* S. Christenson, A. L. Reschly and C. Wylie, Eds., Springer, p 97-131
- Foundation for Young Australians (2009) *How Young People are Faring 2009*, accessed 12 April 2013, 'from <http://www.dsf.org.au/resources-and-research/221-how-young-people-are-faring-2009>
- Fredericks, J. A., Blumenfeld, P. C. and Paris, A. H. (2004) 'School Engagement: Potential of the Concept, State of the Evidence', *Review of Educational Research*, 74(1), p 59-109
- Fredericks, J. A. and McColskey, W. (2012) 'The Measurement of Student Engagement: A Comparative Analysis of Various Methods and Student Self-report Instruments', in *Handbook of research on student engagement* S. Christenson, A. L. Reschly and C. Wylie, Eds.,

Springer, p 763-782

Fullan, M., Hill, P. and Crévola, C. (2006) *Breakthrough*, Corwin Press

Griffin, P. (2012) *The influence of teaching strategies on student achievement in higher order skills*, accessed 15 April 2013, from

http://research.acer.edu.au/cgi/viewcontent.cgi?article=1149&context=research_conference

Griffin, P. and Woods, K. (2006) *Interactive Whiteboards in Victorian Schools: Enhancing Teacher and Pupil Engagement in Learning*. Excerpts from the Report to the Victorian Department of Education and Training

Hattie, J. (2009) *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*, Routledge Hill, R. (2011) *Successful Schooling: Techniques & Tools for Running a School to Help Students from Disadvantaged and Low Socio-economics Backgrounds*

Succeed, Effective Philanthropy, accessed 17 April 2013, from

http://www.effectivephilanthropy.com.au/index.php?option=com_content&view=article&id=13&Itemid=135

Huang Pu District Teacher Training Institute (2011) 'Training and Research for Teachers: Classroom Observation, based on education fairness'

Innovation Unit (2012) *The Engaging School: A Handbook for school leaders*, accessed 16 April 2013, from

http://www.innovationunit.org/sites/default/files/Engaging%20School%20Handbook_0.pdf

Irvin, L. (200) 'Teacher conceptions of student engagement in learning: a phenomenographic investigation', Central Queensland University Jensen, B., Hunter, A., Sonneman, J. and Burns, T. (2012) *Catching up: learning from the best school systems in East Asia*, accessed 22 April 2013, from

<http://grattan.edu.au/publications/reports/post/catching-up-learning-from-the-best-school-systems-in-east-asia/>

Jensen, B. and Reichl, J. (2011) *Better teacher appraisal and feedback: Improving performance*, Grattan Institute, accessed 15 April 2013, from

<http://grattan.edu.au/publications/reports/post/better-teacher-appraisal-and-feedback-improving-performance/>

KPMG (2009) *Re-engaging our kids*, accessed 17 April 2013, from

https://www.eduweb.vic.gov.au/edulibrary/public/stuman/wellbeing/Re-engaging_Our_Kids_KPMG_Apr2010.pdf

OECD (2009) 'Creative Teaching and Learning Environments: first results from TALIS',

Office of Communities Commission for Children and Young People (NSW) (2011)

'Engagement in school', accessed 15 April 2013, from

<http://picture.kids.nsw.gov.au/5/11/6/>

School A to Z (2013) 'Learning's X Factor', accessed 15 April 2013, from

<http://www.schoolatoz.nsw.edu.au/homework-and-study/homework-tips/learning-s-x-factor>

Seal, I. (2009) *Exploring the experiences of new teachers in working with students at risk of disengagement*, DOXA, accessed 16 April 2013, from

<http://www.doxa.org.au/images/engagingteachersfullreport.pdf>

Student Learning Division Department of Education and Early Childhood Development, (2010) *Coaching Teachers in Effective Instruction*, accessed 15 April 2013, from

<http://www.education.vic.gov.au/Pages/default.aspx>

Tadich, B., Deed, C., Campbell, C. and Prain, V. (2007) 'Student engagement in the middle years: A year 8 case study', *Issues in Educational Research*, 17(2), p 256-271

Warren, J. (2012) *Learner Wellbeing and Engagement*, accessed 16 April 2013, from http://www.decd.sa.gov.au/learnerwellbeing/files/links/Learner_Wellbeing_Frameworko_1.pdf

Willms, J. D. (2003) *Student Engagement at School: A Sense of Belonging and Participation*, OECD Publishing, accessed 17 April 2013, from <http://www.oecd.org/education/school/programmeforminternationalstudentassessmentpisa/33689437.pdf>