Welcome

Understanding Year 9 students is the focus of this Research eLert. The two research papers are: Understanding Year 9 Students – A Theoretical Perspective and Understanding Year 9 Students – Implications for Policy and Practice. In addition to the electronic version, we will provide hard copies of the Year 9 papers to all secondary schools.

The first paper is grounded in the latest theoretical research drawn from multi-disciplinary fields of study and explores the learning characteristics of Year 9 students. The paper also identifies teaching and learning practices advocated in national and international research projects that assist in making young people’s schooling at Year 9 more challenging, engaging and rewarding.

The second paper provides examples of how schools are using research to inform and guide their practice and how their work is leading to increasing student attendance and engagement at school. The paper shares the work that is currently being undertaken in Victorian government schools. For example, a peer mentoring program developed at Hampton Park Secondary College has proved to be a positive experience for Year 9 students and students from their local primary schools. The schools see the program as providing opportunities for Year 9 students to develop leadership, cognitive and reflective skills, experience teaching as a career option and build better self-image and self-esteem.

I trust you find the feature articles informative and look forward to your comments and feedback which can be forwarded to: <research@edumail.vic.gov.au>.

Dr Dahle Suggett
Deputy Secretary
Office of Learning and Teaching
Feature Article

Understanding Year 9 Students: A Theoretical Perspective
Understanding Year 9 Students: Implications for Policy and Practice

The paper titled Understanding Year 9 Students – A Theoretical Perspective aims to gain a better understanding of the learning characteristics and environment of these students from multi-disciplinary fields of study. Additionally, the paper identifies teaching and learning practices advocated in national and international research projects. The goal is to build a sound foundation of evidence to advance specific suggestions about ways to improve the learning outcomes for year 9 students. The goal of the second paper, Understanding Year 9 Students – Implications for Policy and Practice, is to provide suggestions about ways to make young people’s schooling at Year 9 more challenging, engaging and rewarding based on the evidence collected from the from the first paper. Additionally, case studies from selected schools are provided to show how the Victorian education system is responding in imaginative and practical ways to the challenges of Year 9 students.

Understanding Year 9 Students: A Theoretical Perspective, Department of Education & Training (2006).

Understanding Year 9 Students: Implications for Policy and Practice, Department of Education & Training (2006).

Related Research

Schooling Issues Digest: Student motivation and engagement

To achieve the outcomes set out in the National Goals for Schooling in the Twenty-First Century, students need to engage actively with schooling. This digest explores the meaning of motivation and engagement, the forms of engagement and the relationship of engagement to achievement. It looks at school factors which influence engagement including the nature of tasks, teacher-student relationships, pedagogy and classroom climate. It discusses the effects school organisation can have on student motivation and engagement and canvases issues for further investigation.


Neuroscience and education: a review of the contribution of brain science to teaching and learning

Dubbed the ‘decade of the brain’, the 1990s saw an increased interest in the implications of neuroscientific research for education. Research into brain-learning continues unabated. What do we now know about the impact of brain function and development on young people’s learning? What is the new thinking on ‘right and left brains’, ‘enriched environments’, and ‘critical periods for learning’ in the early years and in adolescence, described as the ‘second wave’? This review by the Scottish Centre for Research in Education (SCRI) provides us with an intriguing and exhaustive summary of recent research, identifies the new avenues for exploration and debunks some ‘neuromyths’ along the way.
http://www.scre.ac.uk/cat/1860030904.html

Nesta Futurelab report: 14-19 and digital technologies: a review of research and projects

Digital technologies have the potential to offer radically new approaches to the processes of teaching and learning, enabling young people to create coherent pathways through myriad educational choices; access diverse learning experiences in multiple sites of learning and work; and take responsibility for their own assessment. Case studies presented in this report indicate that small implementations of digitally enhanced learning can have a significant impact upon the learning of 14-19 year olds. The authors recommend that teachers adopt a more experimental stance and receive substantial support, if they are to achieve ambitious developmental and learning outcomes. The student voice is also identified as a crucial dimension of change. Interestingly, this study found that, though enthusiastic to embrace digital technologies in learning, students in the 14-19 year age group still prefer to do so in the presence of the teacher as guide.

http://www.nestafuturelab.org/research/lit_reviews.htm#lr13

The Gatehouse Project

A major initiative of the Centre for Adolescent Health, this project promotes the emotional well-being of young people in Victorian secondary schools. It aims to prevent adverse health outcomes such as drug and alcohol use, depression and suicide. The implementation of the Gatehouse model enables participating schools to make changes to their social and learning environments as well as promote change at the individual level. The model provides schools with strategies to increase students’ skills and knowledge for dealing with everyday life challenges. Beyond the 26 schools involved in the original research project, new partnerships with schools and other organisations continue to build on the model.

Centre for Adolescent Health, Parkville, 1997-2007
http://www.rch.org.au/gatehouseproject/

Longitudinal surveys of Australian youth (LSAY) research report 41: attitudes, intentions and participation

Positive attitudes to school, nurtured and developed in the early and middle years of secondary schooling, are the key to increased participation in post-compulsory education, according to a recent ACER report. Researchers, Khoo and Ainley, found that attitudes to school are more strongly related to educational intentions than any aspect of student background, including socioeconomic background and proficiency in literacy and numeracy; although these factors are also significant. Specifically, the longitudinal study established a very high correlation between intentions at Year 9 to complete Year 12 and later participation in Year 12 and a moderately strong correlation between intention and entry to higher education.

Siek Toon Khoo and John Ainley (2005) Attitudes, intentions and participation, LSAY research report 41, Australian Council for Educational Research

A review of middle schooling: concepts and approaches
Many schools in Australia have implemented principles and practices to better engage and motivate adolescent students. The challenge is to achieve sustainable improvements in outcomes by translating accepted principles into effective classroom practice. Changing teaching and learning practices requires teachers to understand the need for change, and effective leadership within schools and school systems. It requires further research on what practices work best. Above all, it requires policy commitment and resourcing from governments. As principles of best practice in schooling rather than principles unique to middle schooling, middle schooling programs could be the vehicle for more extensive change in Australian schools to improve learning outcomes.

*Northern Territory Council of Government School Organisations (2005)*
http://www.betterschools.nt.gov.au/students_learning/middle_years/resources.shtml

**Teaching and learning in the middle years in the ACT: a study to support schools to meet the learning needs of adolescent students**

Concern about alienation, early leaving, and poor academic performance amongst students in the middle years led the Department of Education and Training in the ACT to conduct a study aimed at meeting the particular needs of adolescent learners. A literature review identifying desirable practices, together with a qualitative survey identifying the range of middle schooling practices informed the development of a Framework for Teaching and Learning in the Middle Years. The review concludes that middle schooling practices are effective when they are combined in a cohesive policy and embraced by the whole school population. Individual classroom teachers have the key role of improving engagement and learning of students and consequently there are implications for teacher quality, commitment, professional development and support.

*Australian Capital Territory, Department of Education and Training (2005)*

**Beyond the horseless carriage – Harnessing the potential of ICT in education and training**

This paper articulates some of the issues in the debate about the future of ICT in schools. In the paper, Gerry White argues that the expectation of Rosabeth Moss Kanter over twenty years ago that ICT would be at the heart of the knowledge and communication revolution has not been met in the delivery of education and training services. International research indicates that ICT enables opportunities for teaching and learning activities not possible with print technology and a sequential construction of knowledge. One recent DEST study points to ICT leading to improvements in classroom interactive learning, independent learning, networked learning, organisational learning including learning communities and individualised, managed learning. The paper concludes by stating that there is urgent need for a unified learning theory and exploration of the pedagogical uses of ICT, in other words, technology-enabled learning.

*Gerry White, 2005, education.au limited*

**Developing lifelong learners in the middle years of schooling**

How can effective engagement with learning be encouraged and sustained? In this recent research project commissioned by the Ministerial Council on Education, Employment, Training and Youth Affairs and managed by the Queensland Government, schools were asked to examine the practices, processes, strategies and structures which best promote the development of ‘lifelong learners’ in the middle years of schooling. Key factors identified included: recognition of individual learning styles, focus on student-centred
learning, challenging teaching focused on problem-based approach and the promotion of reflection on learning and curriculum which is based on integration of key areas and explicitly develops social practices. More broadly, the alignment of curriculum, pedagogy and assessment, flexible student groupings, team teaching, exploration of authentic tasks, access to knowledge and research, community oriented and students learning through negotiation is essential.


Prep to Year 10 - Learner characteristics: A discussion paper prepared for the Victorian Curriculum and Assessment Authority for development of the Victorian Essential Learning Standards

What are the metacognitive skills that provide students with strategic competencies for learning - to understand what it means to learn, who they are as learners, how to plan, monitor and revise learning and how to assess and to reflect upon learning? The dramatic shift in the ways we conceptualise children's learning and development is reflected in the emergence of a new field of study, the Learning Sciences. This paper focuses on new understandings of the learning process and development of competent performance. It presents recent research on the reasoning and problem-solving skills of children and adolescents and discusses the acquisition of specific and general learning competencies, with particular reference to the three critical stages of learning; Prep to Year 4, Years 5 to 8, and Years 9 to 10.

Robert Reeve and Mary Ainley (2004) Prep to Year 10 - Learner characteristics: a discussion paper prepared for the Victorian Curriculum and Assessment Authority as theoretical background for development of the Victorian Essential Learning Standards, VCAA


Activities for using the feature articles

Below are some thoughts to assist in reflective practice and to explore future actions.

- Use the research papers as a basis for a series of information nights for the school community
- At School Council, provide extracts from the papers for various sub-committees as a means of sharing research knowledge and informing policy decisions
- Establish reading circles with various teams within the school to explore each section of the papers in depth
- Access the additional research papers from this Research eLert by clicking on the url provided. Distribute the papers to various teams and sections within the school community.

Understanding Year 9 Students: A Theoretical Perspective is divided into three areas:

1. Research on brain development and learning:

Establish a learning circle to discuss how the research around gender differences, risk taking behaviour, emotional responses, sleeping patterns and social interaction skills could be used to inform and guide school policy and practice.

2. Learning and teaching

Discuss the issues related to student motivation, engagement, student resilience and the learning and teaching environment considerations that are pertinent to your school.
3. Advocated teaching and learning practices

Discuss how the teaching and learning practices that are underpinned by middle years research are currently being implemented in your school.

Identify what is working well, where the gaps might be and actions that can be put in place to bridge the gaps.

*Understanding Year 9 Students: Implications for Policy and Practice* provides school examples of programs and activities aimed at Year 9 students.

1. Implications for policy and practice

Use this section of the paper to explore the suggestions and their relevance to your school.

Develop an action plan that responds to those suggestions that your school would like to implement.

2. Case studies

Read through the case studies and discuss how they might apply to the local context.

Make contact with the schools sharing their practice to discuss their work or to arrange a visit to see a particular program in action.

**The Knowledge Bank Connection**

In this edition of *Research eLert* we have highlighted several case studies and Teacher Professional Leave (TRL) reports that tell how schools are responding in novel ways to the challenges of Year 9. Many more examples can be found on Knowledge Bank. Over 400 case studies and TPL reports, written by your colleagues, are there for you to read, share and use.


**Useful Links**

**Adolescent Learning- National**

*Beyond the middle: a report about literacy and numeracy development of target group students in the middle years of schooling* (Commonwealth)

*Blueprint for government schools: FS1-student learning* (Victoria)

*Knowledge Bank case studies* (Victoria)

*Middle years literature review - a report for the NSW Board of Studies* (New South Wales)

*Making the most of middle years: recommended readings* (Northern Territory)

*Middle years of schooling* (Victoria)

*Middle Years of Schooling Association* (Queensland)

*Teaching and learning in the middle years in the ACT: a study to support schools to meet the learning needs of adolescent students* (ACT)

*The middle phase of learning* (Queensland)
Victorian Essential Learning Standards (VELS)

Adolescent Learning - International

Carnegie Council - Preparing adolescents for a new century: great transitions (USA)
Carnegie Council Report - Preparing adolescents for a new century (USA)
Department for Education and Skills (DfES) - Transforming the education system for 14-19 year olds (UK)

Brain Development

Adolescent brain development: New York Academy of Sciences (USA)
CERI Learning Sciences and Brain Research (OECD)
CERI Languages, Sciences and Brain Research
Inside the teenage brain: what's going on in there? How Science may help to explain the mystery of the teenage years: PBS Frontline Program (USA)

Learning Centres

The Alpine School - A Centre for Student Leadership
The City Centre - The City as Classroom: Transforming the Middle Years Curriculum for Years 9 and 10

Other Related Research Sites

AIFS Australian Temperament Study
ACER Longitudinal Studies of Australian Youth
Annenberg Institute
Australian Clearinghouse for Youth Studies
Centre for Adolescent Health
Dusseldorp Youth Forum
Middle Years of Schooling Association
NESTA Futurelab Research

Upcoming Events

Visions of Learning - ASLA Online 11
8-26 May 2006
Online – hosted by the Australian School Library Association

Department of Education & Training VET Planning and Research Network forum – Integrating Research, Policy and Practice
12 May 2006
VUT Conference Centre, Melbourne 9.15am to 2.30pm

**International Middle Years of Schooling Conference - Middle Schooling Association of Western Australia**
13-15 May 2006
Perth, Western Australia

**Excitement in the Classroom - The 1st ACEL/Microsoft Online Conference on Innovative Teaching and Learning**
15-21 May 2006
Online - hosted by Australian Council for Educational Leaders (ACEL) and Microsoft
http://www.cybertext.net.au/acel06.htm

**Reading Between the Lines: Summing up Adult Literacy and Numeracy Research: Melbourne Breakfast Briefing – National Centre for Vocational Education Research (NCVER)**
17 May 2006
Melbourne, Victoria
http://www.ncver.edu.au/newsevents/events/adultliteracy/breakfast.html#Dates_venues_speakers_and_TO_REGISTER

**Association of VET Professionals (VISTA) Annual Conference 2006 – The VET/VTE Game**
21-23 May 2006
Lorne, Victoria

**Learning Choices Expo 2006 – Dusseldorp Skills Forum**
24-25 May 2006
Maroochydore, Queensland

**5th International Conference on Drugs and Young People - The Australian Drug Foundation (ADF)**
24-26 May 2006
Sydney, New South Wales

**Australian College of Educators (ACE) National Conference - Teachers Shaping Futures: Futures Shaping Teaching**
25-27 May 2006
Sunshine Coast, Queensland
http://www.apapdc.edu.au

**Lifelong Learning Conference – Central Queensland University (CQU)**
13-16 June 2006
Yeppoon, Queensland

**Focus Education Australia – Learning Brain Expo Australia 2006**
2-4 October
Caloundra, Queensland

**Contributions and Feedback**
We are keen to hear about research being undertaken in your school or institution and encourage you to share your work via the Research eLert. If you would like to provide feedback, including suggestions to
improve Research eLert, please forward your information, suggestions or comments to: <research@edumail.vic.gov.au>.

Next edition

The next edition of Research eLert will be available in late Term 2, 2006 and focuses on Literacy in the compulsory years of schooling. The research paper synthesises national and international literacy research in the last five years, as a resource to inform and guide practice in Victorian schools.

We are keen to include information on how schools and other learning organisations are using research to inform and guide their practice and would like to include some of this work in Research eLert. If you are interested, please contact the Research and Development Branch at: <research@edumail.vic.gov.au>.

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